SERVICE MANUAL

COLOR MONITOR

HP MX704 Series



41AP773-HP-E49
Ver:A01
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REV	DATE	DESCRIPTION	APPROVALS
A00	Jan-16-04	NEW VERSION RELEASE	
A01	Feb-08-04	Update BOM	
A02	Jul-27-05	Update BOM	

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1. SPECIFICATIONS FOR HP MX704 SERIES COLOR MONITOR

1. CRT : 43.2CM(17") 90 Deflection, 29mm Neck, 0.27mm Dot Pitch, Pure Flat, Non-Glare Screen

2. Viewable image Size: 40.6CM (16") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Power On/Off, Power led, Function knob(Contrast, Brightness, H-Center, H-Size, V-Center, V-Size, Rotation, Pincushion, Trapezoid, Pin-Balance, Parallelogram, Color Temperature, Degaussing, Recall, Exit,

5. Input Video Signal

Mode	1	2	3	4	5	6	7	8	9
Horizontal Freq. (KHz)	31.47	31.47	37.500	43.27	46.87	53.674	60.023	68.677	63.981
Dot Clock (MHz)	28.30	25.175	31.500	36.00	49.50	56.25	78.75	94.50	108.00
Horizontal Lines	720	640	640	640	800	800	1024	1024	1280
Vertical Lines	400	480	480	480	600	600	768	768	1024
H. Sync Polarity	NEG	NEG	NEG	NEG	POS	POS	POS	POS	POS
H. Period (µs)	31.921	31.778	26.667	23.111	21.333	18.631	16.660	14.561	15.630
H. Sync Width (µs)	3.814	3.813	2.032	1.556	1.616	1.138	1.219	1.016	1.037
H. Back Porch (µs)	1.907	1.589	3.810	2.222	3.232	2.702	2.235	2.201	2.296
H. Active (µs)	25.424	25.422	20.317	17.778	16.162	14.222	13.328	10.836	11.852
H. Front Porch (µs)	0.911	0.318	0.508	1.556	0.323	0.569	0.203	0.508	0.444
H. Blanking (µs)	5.861	5.720	6.349	5.333	5.172	4.409	3.657	3.725	3.778
Vertical Freq. (Hz)	69.616	59.940	75.000	85.008	75.00	85.061	75.029	84.997	60.020
V. Sync Polarity	POS	NEG	NEG	NEG	POS	POS	POS	POS	POS
V. Period (ms)	14.364	16.683	13.333	11.764	13.333	11.756	13.003	11.765	16.661
V. Sync Width (ms)	0.064	0.064	0.080	0.069	0.064	0.056	0.050	0.044	0.047
V. Back Porch (ms)	1.149	0.794	0.427	0.578	0.448	0.503	0.466	0.524	0.596
V. Active (ms)	12.768	15.253	12.800	11.093	12.800	11.179	12.795	11.183	16.005
V. Front Porch (ms)	0.000	0.064	0.027	0.023	0.021	0.019	0.01 7	0.015	0.016
V. Blanking (ms)	1.149	0.922	0.533	0.670	0.533	0.578	0.533	0.582	0.656

6. Scanning Frequencies
   Horizontal: 30KHz ~ 70KHz
   Vertical: 50 Hz ~ 140 Hz

7. Factory Preset Timings:9
   User Timings: 8

8. Video Bandwidth: 110 MHz

9. Power Source:
   Switching Mode Power Supply
   AC 90 ~265V, 50/60Hz Universal Type

10. Operating Temperature: 10°C to 35°C Ambient

11. Humidity: 20% to 80% Relative, Non-Condensing

12. External Connection:
15 Pin D-type Connector
AC Power Cord

13. Regulations:UL, CSA, FDA, FCC, TÜV/GS, CE, MPR-II,TCO,CCC

14. Key FOS spec.

NO	Measurement Item	Conditions	Spec
1	Image size	B-50 % C→MAX	W=312±4 mm H=234 ±4 mm
2	Image centering	B-50 % C→MAX	HOR.|a-b|≦4.0mm VER.|c-d|≦4.0mm
3	Geometry Distortion	B-50 % C→MAX	<2.0mm
4	Tilt	B-50 % C→MAX	HOR≦1.0 mm
5	Raster Luminance	B-MAX C→MAX *Black pattern*	0.2 ～ 2.0 FL
6	Full White	B-50 % C→MAX	≧30 FL
7	ABL (30% block) luminance	B-50 % C→MAX	≧45 FL
8	Size regulation	B-50 % C→MAX	<1mm (each side)
9	Color Temperature / 9300K Color Temperature / 6500K	B-50 % C→MAX B-50 % C→MAX	x/y:0.283/0.298± 0.015 x/y:0.313/0.329± 0.015
	Color Temperature / 5500K	B-50 % C→MAX	x/y:0.333/0.348± 0.015
10	Purity	B-50 % C→MAX	x, y <0.015
11	Color Tracking	B-50 % C→MAX Default → 5 FL	x/y: ± 0.015
12	Brightness Uniformity	B-50 % C→20 FL	≧75 %
13	Linearity	B-50 % C→20 FL 12x9 X-hatch	(max-min) /(Max+Min) ×100≦5 ％ Adjacent < 4%
14	Power consumption	Normal Active off Switch off	<100W *(LED Green)* < 4W *(LED Amber)* *<1W (LED OFF)*
15	Misconvergence	B-50% C→MAX	Zoon A (Center)≦0.25mm Zone B (Circle)≦0.35 mm
		VGA MODE	Zone A≦0.30 mm Zone A≦0.40

2. PRECAUTIONS AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.
2. Operation of the display with the cover removed, may cause a serious shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.
3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.
4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.
5. Symbol"⚠ " means safety relative parts. The use of substitute replacement parts which do not have the same characteristics as specified in the parts list may create shock, fire or explode etc.
6. Symbol "@ " means X-ray relative parts. Before replacing any of these components please read the parts list in this manual carefully to avoid creating higher anode voltage or x-ray. Especially for sealed controls, such as VR901,VR902, VR701 and FBT screen VR etc, which were sealed by the manufacturer once their optimum position has been set, please don't dismantle them as your likes, otherwise you will break or damage the component. If you need replace the parts with sealed control, please adjust the relative VR903 to make sure the voltage about 13.8V,please adjust the relative VR to make sure the B+ voltage about 58.0V for CPT CRT and 57.0V for LPD CRT, and well seal it with A+B glue or equivalent, which you can not move away with one screw driver
7. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads.
   Test method for current leakage is described as follow.
   (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).
   (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15UF, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15UF capacitor.
   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.
   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more than 1/2W of metal oxide film resistor) in circuit board, keep the resistor about 10mm (1/2 in) away from circuit board.
3. Keep wires away from high voltage or high temperature components.
4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on this model should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnecting ground lead connections between chassis and picture tube dag when operating chassis.

Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

24.8KV ± 1KV

with a line voltage of 120/240 VAC. Higher voltage may also increase possibility of failure in HV supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

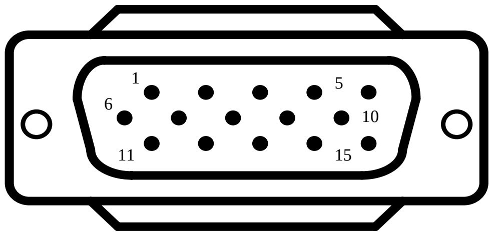
To determine the presence of high voltage, use accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage System, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead.(AC line cord disconnected from AC power outlet.)

The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continue safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the Color display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	9.	5V
2.	GREEN	10.	SYNC. GND
3.	BLUE	11.	NC
4.	NC	12.	SDA
5.	GND	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC (∗VCLK)
7.	GND-G	15.	SCL
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for display tube warm-up. The Power-On indicator lights when the display is on.
4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.
5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
6. If your color display requires service, it must be returned with the power cord.

4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

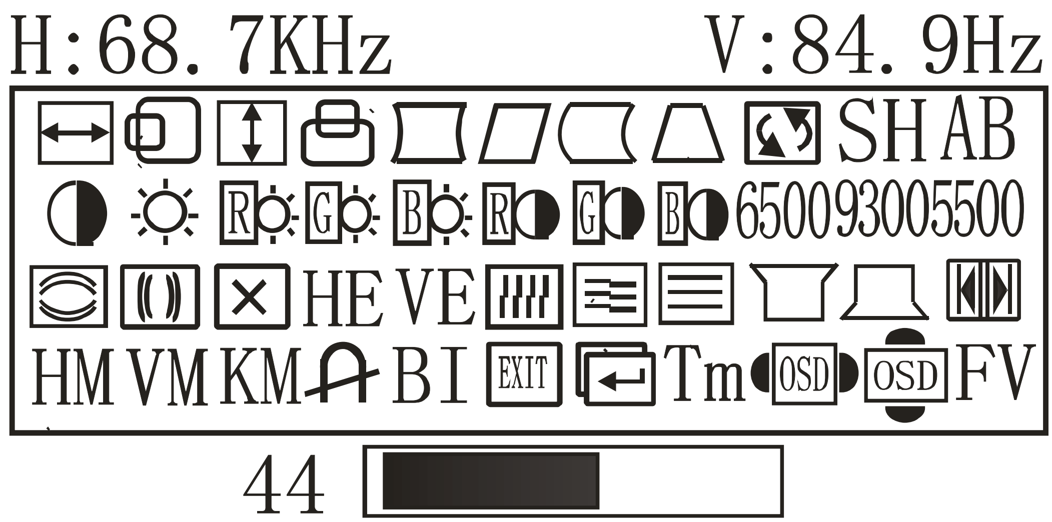
4-2 MAIN ADJUSTMENTS

NO.	FUNCTION		LOCATION	DESIGNATION
1	TP901ADJ		PCB - MAIN	VR903
2	B + ADJ		PCB - MAIN	VR902
3	SCREEN ADJ		FLY BACK TRANS	T402
4	FOCUS ADJ		FLY BACK TRANS	T402
5	ABL ADJ		PCB - MAIN	VR701
6	FUNCTION ADJ	-MENU	PCB - MAIN	SW101
		- DOWN (-)	PCB - MAIN	SW102
		- UP (+)	PCB - MAIN	SW103

4-3 ADJUSTMENT METHOD

1. TP901, B + & HV voltage adjustment:
   A. Chroma-2000 Signal generator or PC equivalent set mode 1, VGA 640X480 pattern 1.0 .
   B. Connect a DC Volt meter between TP901 and ground, then adjust VR903 to be 13.8VDC for CPT CRT or LPD CRT.
   C. Connect a DC Volt meter between TP902 and ground, then adjust VR902 to be 62.0 VDC for CPT CRT or LPD CRT.

2. Factory preset Timings Adjustment:
   A. Press MENU Key to show OSD window press Up or Down Key to switch the functional controls.
   B. Press the Up Key to select the "EXIT" function, then press the MENU Key. While do not release the MENU Key until the OSD window changed to the Factory preset window.
   C. The Factory preset window contains the following functional controls. Select one of the control. Then press the Up/Down Key to adjust its value for the optimum picture.



(The OSD menu for factory preset FOR WT CPU)

	H-SIZE		H-MOIRE REDUCE
	H-CENTER		MOIRE DISABLE
	V-SIZE	HE	NO USE
	V-CENTER	VE	NO USE
	PINCUSHION		NO USE
	PARALLELOGRAM		V-LINEARITY
	PIN-BALANCE		V-LINEARITY
	TRAPEZOID		TOP CORNER
	ROTATION		BOT CORNER
SH	NO USE	AB	NO USE
	CONTRAST	HM	MAX-HSIZE MODIFY
	BRIGHTNESS	VM	MAX-VSIZE MODIFY
	R-BIAS	KM	MAX-TRAPEZOID MODIFY
	G-BIAS	BI	BI SELECT FUNCTION
	R-BIAS		DEGAUSS
	R-GAIN		OSD EXIT
	G-GAIN		RETURN
	B-GAIN	Tm	BURN IN TIME

9300	COLOR TEMPERATURE	OSD	USER OSD HORIZONTAL LOCATION ADJUST
6500	COLOR TEMPERATURE	OSD	USER OSD VERTICAL LOCATION ADJUST
5500	COLOR TEMPERATURE	FV	FACTORY OSD VERTICAL LOCATION ADJUST
	V-MOIRE REDUCE		Max H-Frequency select

D. To switches the input signal to the other Timing Mode. Please follow step A ~ C to get the optimum picture.(H/V-size:312*234mm)

E. Select the " " RETURN function and press the MENU Key, then the Factor Preset window will be returned to the original OSD window.(user's operating condition)

F. The setting data of the CONTRAST, BRIGHTNESS, ROTATION, COLOR TEMPERATURE are common mode saved in the memory. Don't needed adjust it individual at every timing Mode and save in the memory.

3. White Balance, Luminance adjustment:

A. Bias (Raster) adjustment:

(a) Set mode8 1024×768 @85Hz full white pattern(100% white field).

(b) To make the adjustment condition is under the Factory preset OSD menu. Same as step 2-B.

(c) Warm up more than 20 minutes.

(d) Put the probe in the middle of screen, Brightness set to maximum. Contrast set to max. change to Raster pattern(No video)1024×768 @85Hz, set G-Bias 40,then adjust B-Bias , R-Bias and FBT screen VR, to make the color temperature x= 265 ±10, y= 290 ± 10, Y=0.6±0.02FL

(e) Press up or down key to select cursor on 9300 icon and than press menu key for saved the bias data to EEPROM.

B. 9300 and 6500 5500 color temperature window pattern(20% white field) adjustment:

(a) Set mode 1024×768 @ 85Hz Raster pattern.

(b) adjust Brightness , to make raster Luminance is 0.06 FL.

(c) Change mode to 1024×768 @ 85Hz window pattern(20% white field).put the probe in the middle of screen ,Adjust G-Gain , B-Gain , R-Gain , to make color temperature x=283±10, y=297 ± 10, Y= 48±0.6FL.then save to 9300.(use up/down key select cursor on 9300 icon and than press menu key)

(d) Adjust G-Gain , B-Gain , R-Gain , to make color temperature x=313±10, y=329± 10, Y= 48±0.6FL.then save to 6500.

(e) Adjust G-Gain , B-Gain , R-Gain , to make color temperature x=333±10, y=346± 10, Y= 48±0.6FL.then save to 5500.

C.Full white luminance(100% white field) for 9300:

(a) Set mode 1024×768 @ 85Hz full white field

(b) Adjust VR701 to the luminance at 33 ± 0.3FL.

D.Cut off adjustment:

(a) Set mode 1024×768 @85Hz Raster pattern.

(b) Adjust Brightness , to make Y= 0.06 FL.then return from factory OSD mode to user OSD mode.

4. Focus Adjustment:

A. Set mode 1024×768 @85Hz with crosshatch pattern.

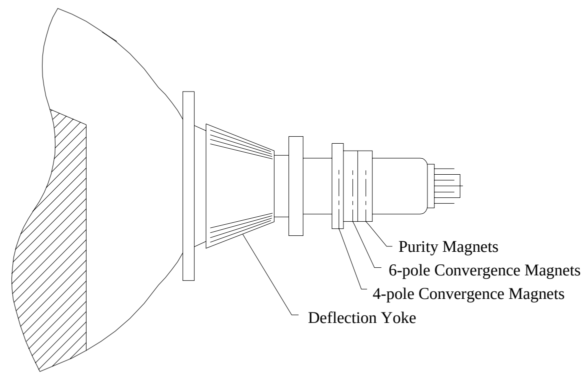
B. Then adjust focus VR1 to a fine vertical line.

C. Adjust focus VR2 to a fine horizontal line.

D. Repeat step B & C. and change to full text pattern double check focus uniformity.

5. Purity Adjustment
   A. Be sure that the display is not being exposed to any external magnetic fields.
   B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29mm. (See below diagram)
   C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180'.
   D. Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS



6. Convergence adjustment

   A. Produce a magenta crosshatch on the display.
   B. Adjust the focus for the best overall focus on the display.
      Also adjust the brightness to the desired condition.
   C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)
   D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.
   E. Produce a white crosshatch pattern on the display.
   F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.
   G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

5. CIRCUIT DESCRIPTION

5-1 MICRO CONTROLLER CIRCUIT

MICRO Controller

The IC101 contains a 6502/8051 8-bit CPU core, 512 bytes of RAM, 16K bytes of ROM,14 channel 8 bit PWM D/A converters, 2 channel A/D converters for key detection, one 8 bit pre-loadable base timer, internal H-sync and V-sync signals processor providing mode detection, watch- dog timer preventing system from abnormal operation, and an I²C bus interface.

H/V sync signals processor

The functions of the sync processor include polarity detection, H-SYNC & V-SYNC signals counting, Programmable SYNC signals output, free running signal generator. Pin39/Pin40 are for the H-SYNC and V-SYNC input, Pin32/Pin33 will output the same signal as input sync signal without delay, and the polarity are setting in the positive. When no signal input, the Pin32 will output a 72Hz V-SYNC free run signal. The Pin33 will output a 48KHz H-SYNC free run signal. for the monitor testing use.

5-2 DEFLECTION CIRCUIT

The deflection circuit is achieved by a high performance and efficient solution IC 401 (STV6888) for this monitor. The concept is fully DC controllable and can be used in applications with a micro-controller solutions.
The STV6888 provides sync. Processing with full auto sync. Capability, a flexible SMPS block and an extensive set of geometry control facilities. Further the IC generates the drive waveforms for DC coupled vertical boosters to the TDA9302A.

Horizontal Oscillator

The oscillator is of the relaxation type and requires a capacitor of C409 at pin6. The free running frequency is determined by a resistor R412 from pin8 to ground.

PLL 1 Phase Detector

The phase detector is a standard one using switched current sources. It compares the middle of H-sync. with a fixed point on the oscillator saw-tooth voltage. The PLL loop filter C435, C437, R411 is connected to Pin9.

PLL2 Phase Detector

This phase detector is similar to the PLL1 detector and compares the line flyback pulse at pin 12 with the oscillator saw-tooth voltage. The PLL2 detector thus compensates for the delay in the external H-deflection circuit by adjusting the phase of the HDRV output pulses. The phase between H-flyback and H-sync can be controlled at pin5.

X-ray Protection

The X-ray protection input pin25 provides a voltage detector with a precise threshold. If the voltage exceeds this threshold for a certain time, an internal latch switches the whole IC into protection mode. In this mode several pins are forced into defined states:
Pin28 (BDRV) is floating
Pin26 (HDRV) is floating

Vertical Oscillator

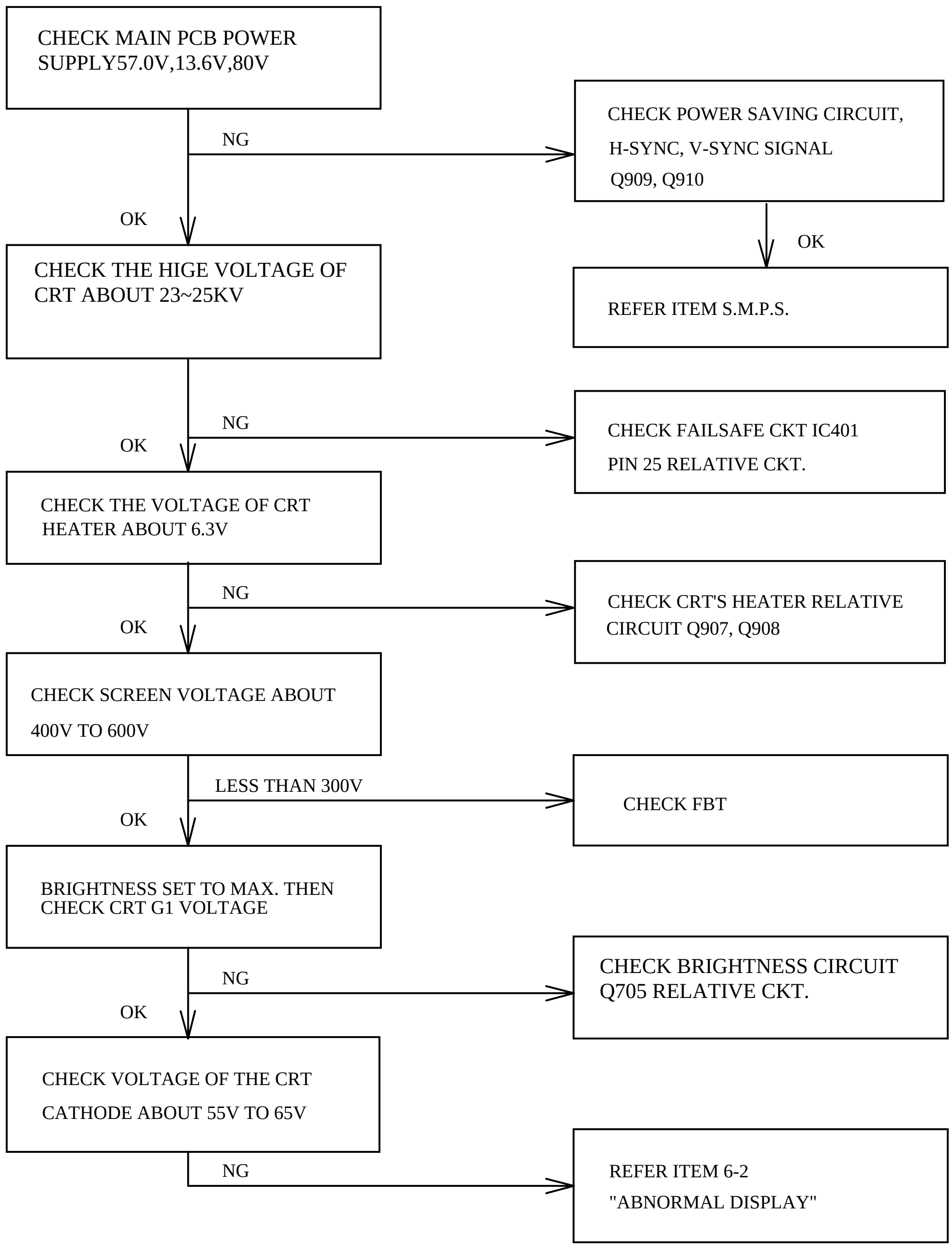
The vertical free –running frequency is determined by the capacitance C613 at pin22. Usually the free-running frequency should be lower than the minimum trigger frequency.

5-3 TRANSISTOR & DIODE CIRCUIT

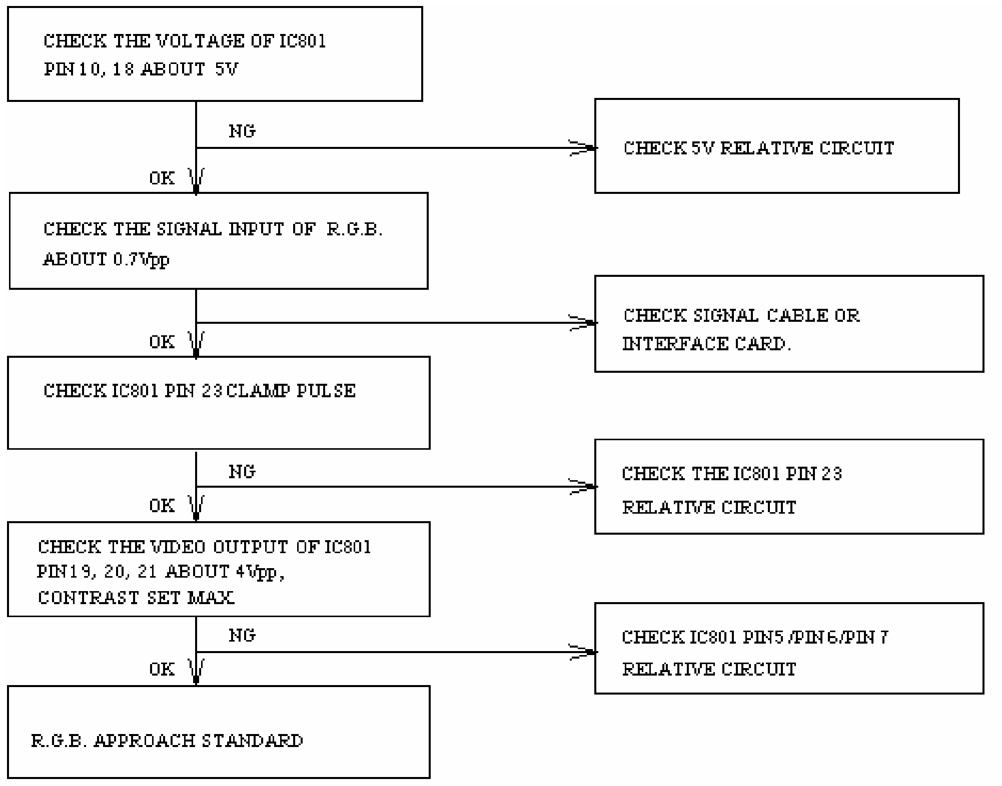
LOCATION	CIRCUIT FUNCTION DESCRIPTION
BD901	Bridge Rectifier for AC Source
D910	Clamp Diode for snub CKT
D918, D919	Rectifier for Output Voltage
D922	Rectifier for Output Voltage
D923	Rectifier for Output Voltage
D925	Rectifier for B+ Supply
D929	B+ Feed Back Rectifier from F.B.T Pulse
IC901,Q901	Power IC for Switching Power Control. (Build-in MOS FET)
Q907, Q908	Use for Power Saving to Cut-off 6.3V Supply Voltage
Q909, Q910	Use for Power Saving to Cut-off 14V Supply Voltage
Q912, Q920	Push-Pull Topology to Drive Q911
Q913	Degaussing Switcher Transistor
Q906	5V Regulator Transistor
Q402	HOR. Driver Transistor
Q440	Horizontal s correction control MOSFET(Four in one)
Q404, Q405	As Differential Amp. to Drive Q406
Q406	Transistor for H-Size Control
Q705	Brightness Control CKT
Q742	V-Dynamic focus CKT

6.TROUBLE SHOOTING CHART

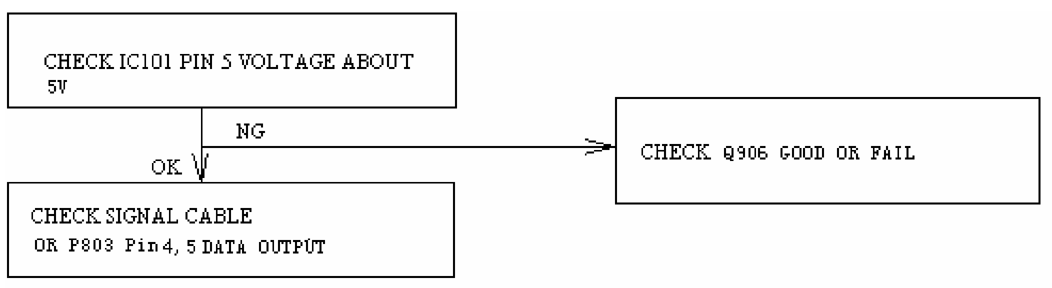
6-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS



2.ABNORMAL VIDEO LEVEL ON SCREEN

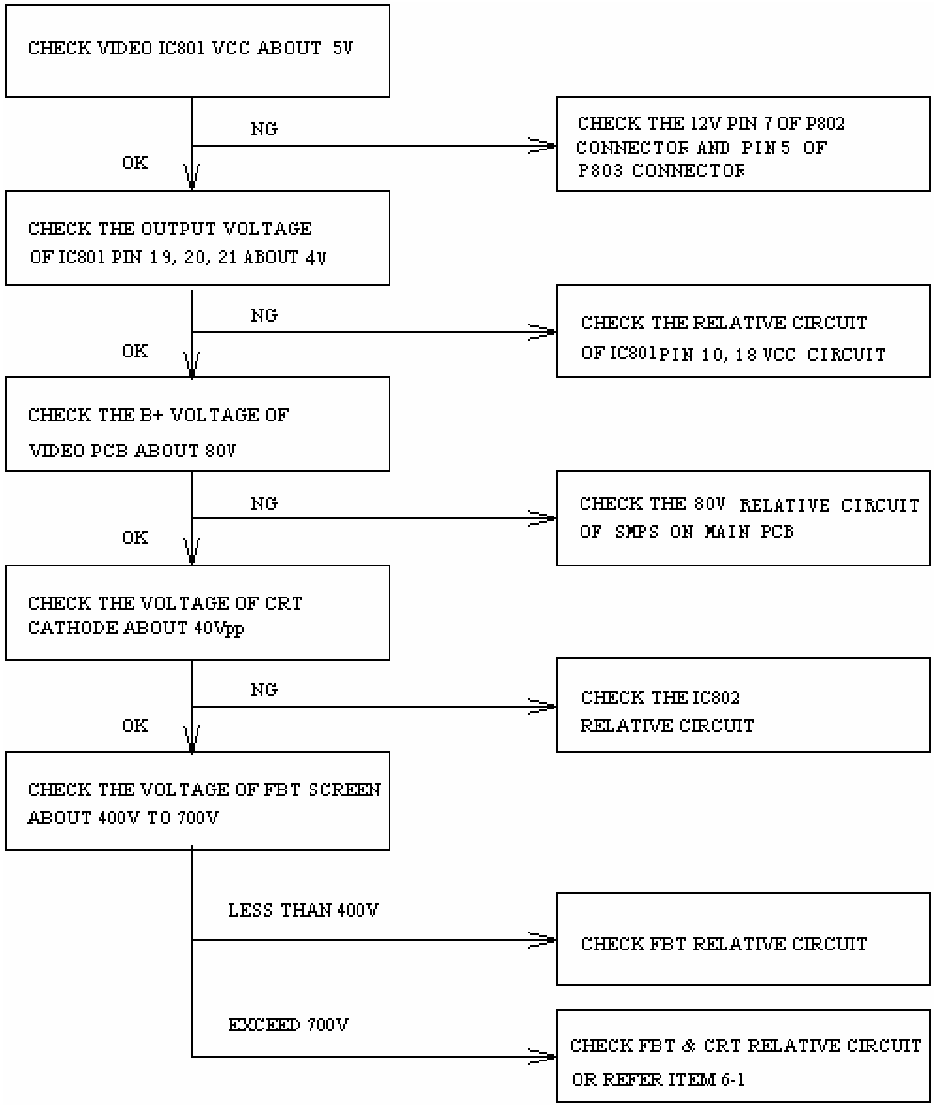


3. ABNORMAL DDC (PLUG & PLAY)

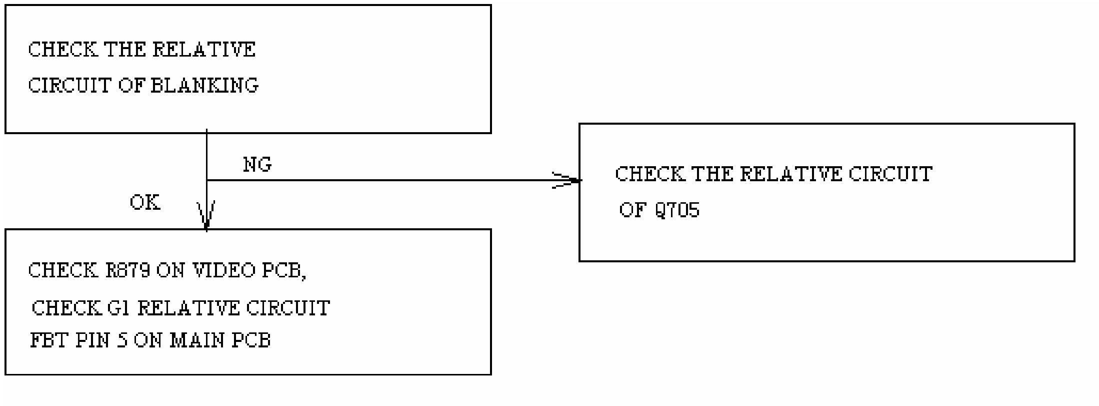


6-2 ABNORMAL DISPLAY

1.NO SIGNAL ON SCREEN

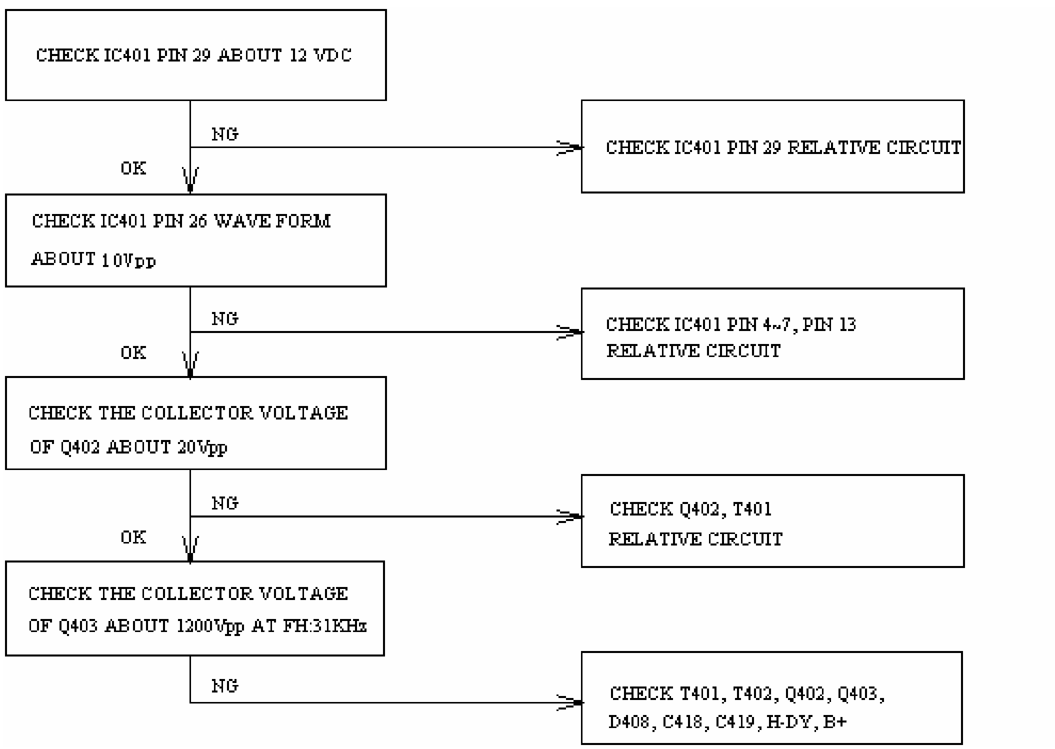


6-3 NO BLANKING



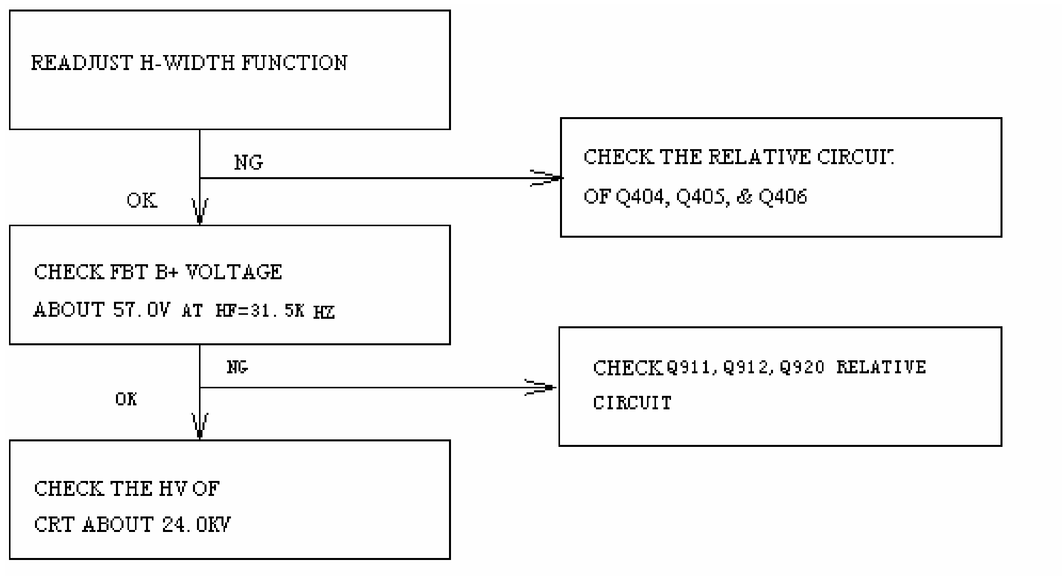
6-4 HOR./OSC/DEF/HV CIRCUIT FAULT

1. NO RASTER (DISCONNECT WITH SIGNAL CABLE)



6-5 ABNORMAL HORIZONTAL DEFLECTION

1. ABNORMAL HORIZONTAL WIDTH OF VIDEO



2. ABNORMAL HORIZONTAL VIDEO CENTER

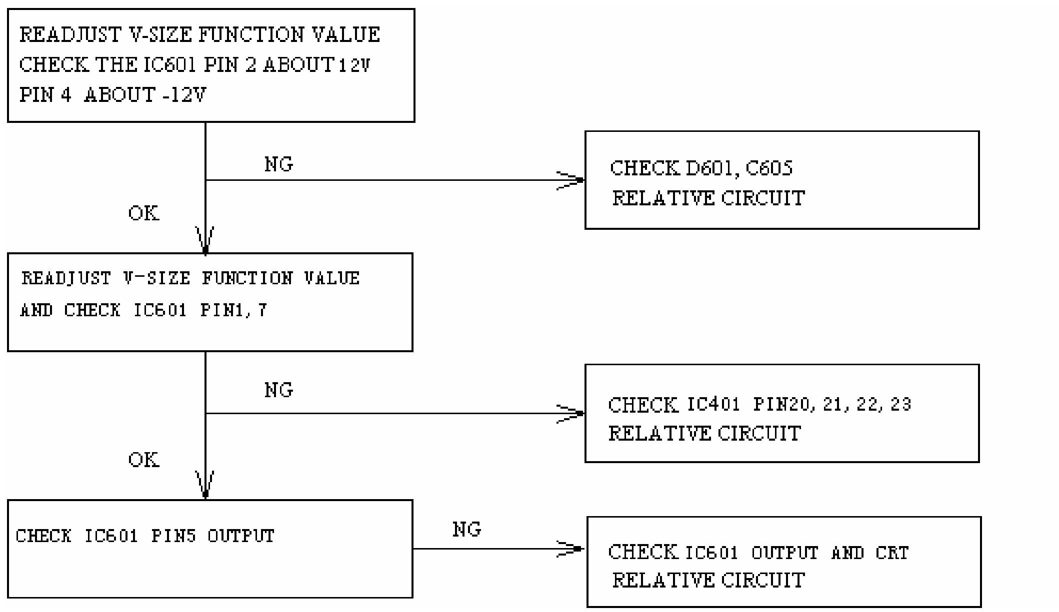
CHECK IC401 PIN 4, 7
RELATIVE CIRCUIT

3. ABNORMAL HORIZONTAL LINEARITY

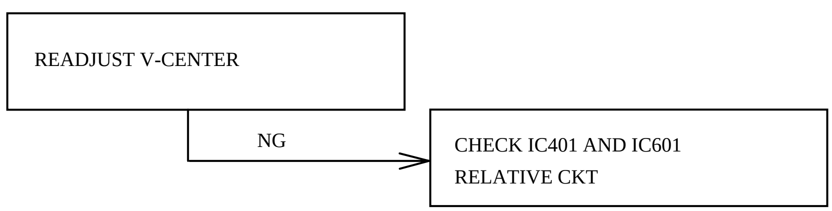
CHECK L401 AND Q440 RELATIVE CIRCUIT

6-6 ABNORMAL VERTICAL SCANNING

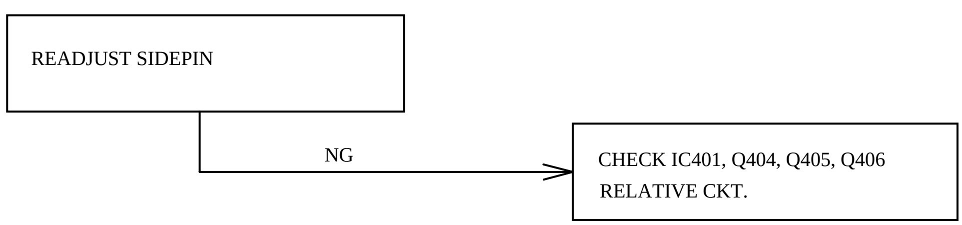
1. ABNORMAL VERTICAL SIZE



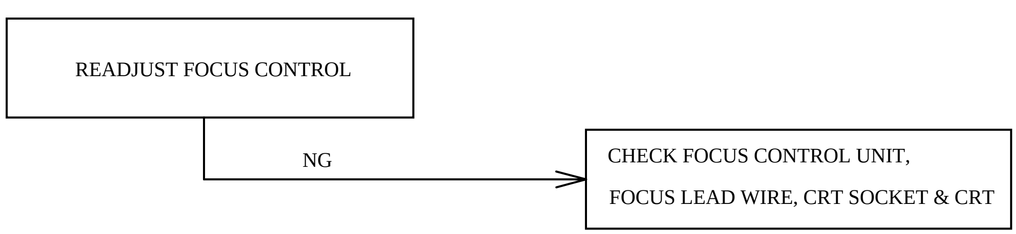
2. VERTICAL CENTER



6-7 SIDE-PIN CUSHION DISTORTION

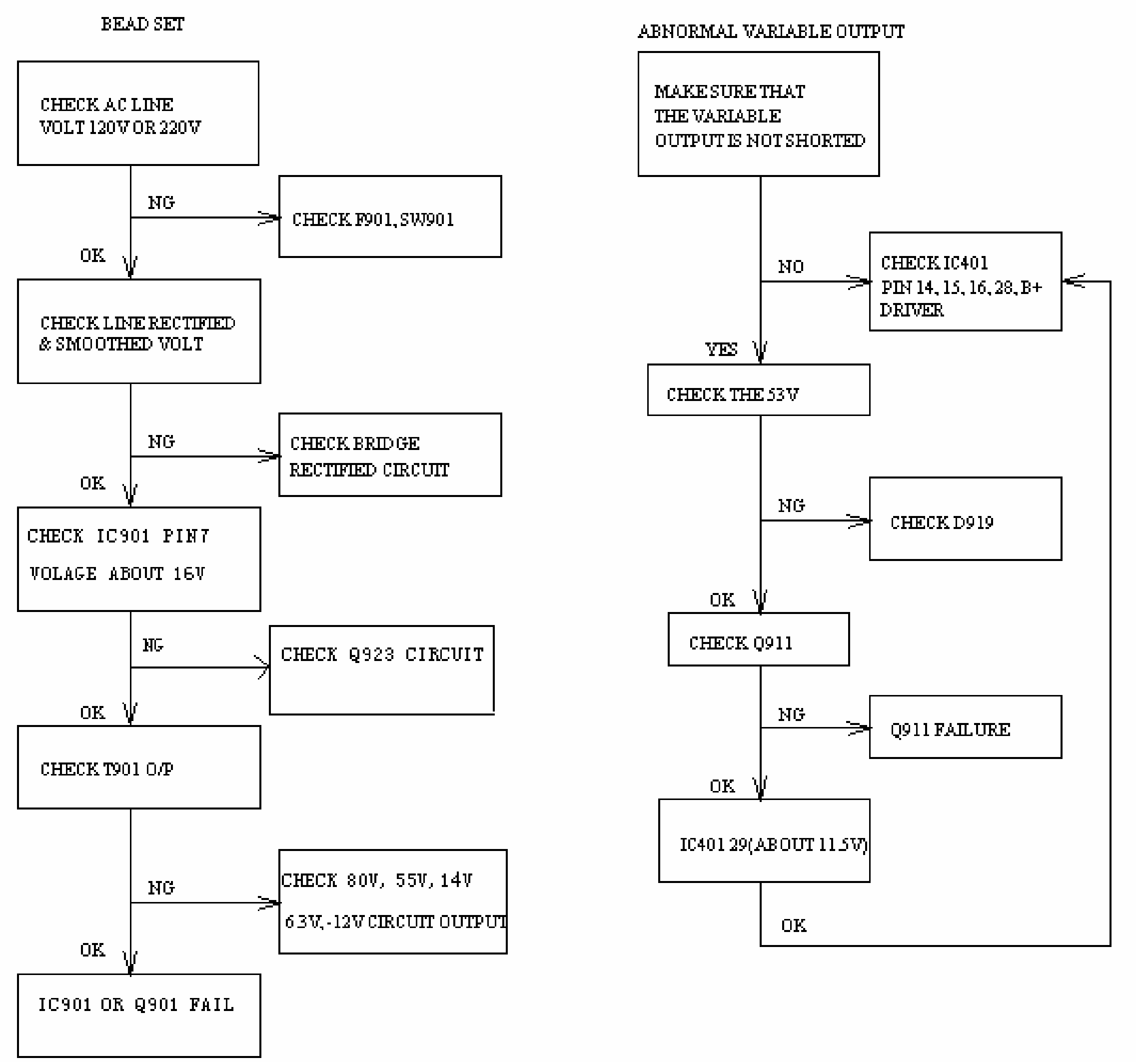


6-8 POOR FOCUS

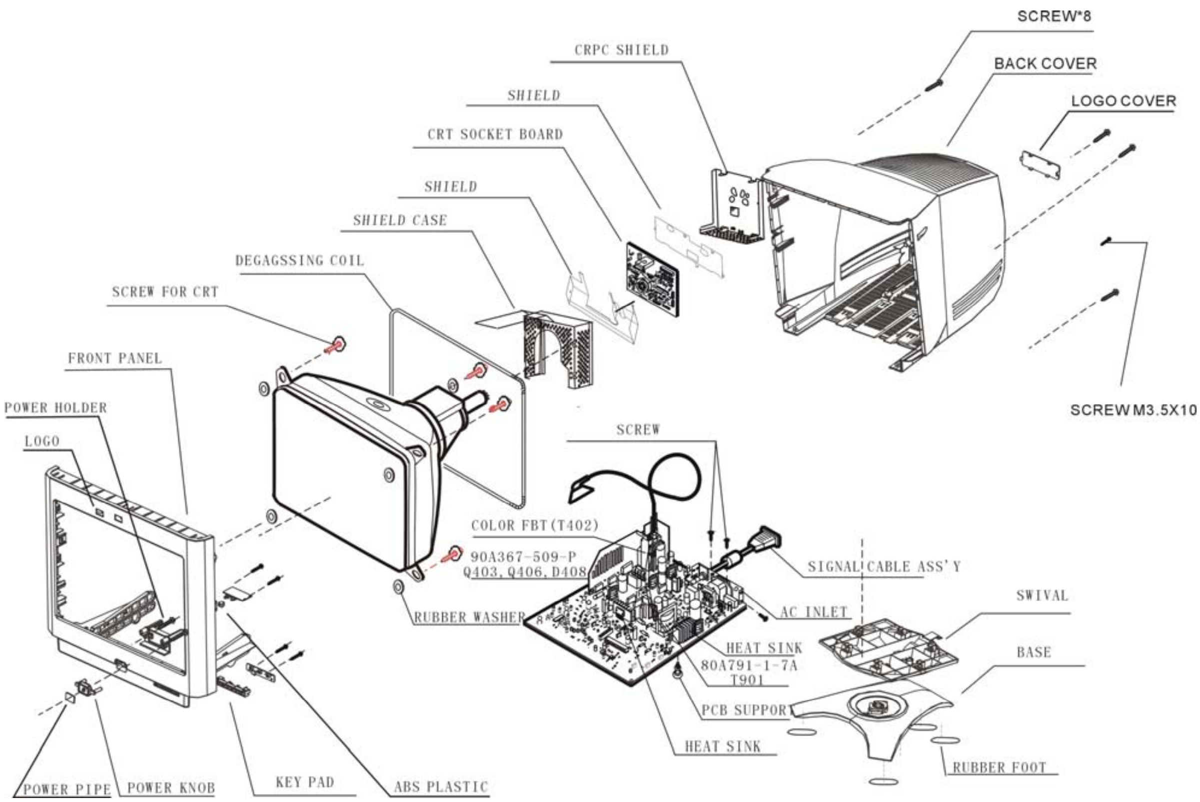


6-9 POWER SUPPLY TROUBLE SHOOTING CHART

BEFORE CHECK SW.REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM
POWER SUPPLY OUTPUT: (A) VARIABLE OUTPUT : 65V ~ 165V
(DEPENDING EPENDING UPON H.SYNC FREQUENCY)
(B) CONSTANT OUTPUT : 6.3V, 14V, -12V, 80V



7. MECHANICAL OF CABINET FRONT DIS-ASSEMBLY



8. PARTS LIST OF CABINET

LOCATION	HPQ MX704	SPECIFICATION
	(LOW RADIATION 220V)	
	CMP773Z2NHP	CHASSIS ASS’Y
	CMP773Z2NH	CHASSIS FOR P773Z-2HPQ
	1C 503503 47	SCREW FOR CRT
	5C 38501	RUBBER WASHER
	7C 1 4	WOODEN PALLET
	11C 112500	WIRE MOUNT
	11C 115500	FBT CLIP
	11C6033 1	PCB SUPPORT
	19C 403 7	STEEL
	19C 506505	SPRING
	23A3178690 3A	LOGO
	33C3663 1	CRT SUPPORT
	33C4374 CM 2A	LOGO COVER
	33C4729 2 C	POWER PIPE
	33C4730 1 L	POWER KNOB
	33C4732 CN A	KEY PAD
	34C 939 CM L	SWIVEL
	34C1250HCM A	BACK COVER
	34C1328ACN A	FRONT PANEL
	34C1329 CM L	BASE
	40C 15571614C	SAFETY LABEL
	40C 58171626A	CARTON LABEL
	40C2064690 1B	ID LABEL
	41C6800690 7A	QUICK SETP POSTER(5990
	41C680069012D	DOC KIT(359436-DP4)
	44C67A7690 5A	CARTON
	44C67B2 1	EPS CUSHION
	44C67B2 2	EPS CUSHION
	45C 76 28 H	PE BAG FOR MANUAL
	45C 88 7 H	PE BAG FOR MONITOR
	45C 88507	17" OUT PE BAG
	45C 88601	EPE COVER
	49C 51 1A	SPRING
	85C6020500	GROUNDED PLATE
	85C6027506	SHIELD
	85C6028500	SHIELD CASE
	89A174B5EC BK	SIGNAL CABLE
⚠	89C414A18N IS	POWER CORD
	95C 91205749	WIRE HARNESS
	95C205R 3012B	COPPER BRAID
	95C2070554	WIRE
	B1C1035 10 47	SCREW
	D1C1140 8128	SCREW4.0X8
	Q1C 340 16 47	SCREW
	Q1C1030 10128	SCRIW
	705A 78 HP CN	SPEAKER
	705A773ZP33HPQ	KEY BOARD ASS'Y
⚠	750A1697504JRG	DEG COIL 0.41*90TS

PARTS LIST OF KEY BOARD

	LOCATION	CMP773Z2NHPQ	SPECIFICATION
		AMP773Z2NHPQ	MAIN BOARD ASS'Y
		CKP773Z2NHPQ	CRT BOARD ASS'Y
		AMP773Z2NHPQ	MAIN BOARD P773Z-2HPQ
		CRP773Z2NHPQ	CRT BOARD P773Z-2HPQ
		1C 421 4128	SCREW
		15C5640 1 A	GND LUG
		19C 555 1	CLIP
		40C 581624 2B	CHASSIS LABEL
		71C 100 2 S	CORE 8*16*12
		71C 100 8	FERRITE CORE 12*25*15
		71C 100 9	FERRIRE CORE 28.5*17.5
		85C 588 1	SHIELD
		95C 205 30042	4" WIRE
		B1C1040 12128	SCREW
		D1C1140 7128	SCREW 4X7(FOR AC)
		M1C1140 6128	SCREW
	(JS101)	95C 90 23	JUMPER
!	BD901	93C 50460 T	TS4B05G
	C405	67C 309102 3	1000UF +-20% 16V
	C414	67C215R100 8K	10UF 63V
	C418	63C210J5128CC	5.1nF/2KV +-5%
	C419	63C210J4027CC	4000PF 1.6KV
	C421	65C 1K472 1A	.0043UF +-5% 1600V FOR
	C422	64C100J225 59	2.2UF +-5% 100V
	C425	63C210J3043CC	.30UF 400V
	C426	63C210J2742CC	.27UF +-5% 250V
	C427	63C210J1842CC	0.18UF +-5% 250V FOR C
	C428	63C210J7542CC	0.75UF 250V
	C460	65CUP054732TM	0.047uF 50V X7R MULTIL
	C481	67C 21547012H	47UF +-20% 250V HERMEI
	C482	67C 21547012H	47UF +-20% 250V HERMEI
	C488	65C 2K101 6A	100PF 1KV
	C900	65A305M4722B3	4700PF +-20% 400VAC/25
!	C902	63C107K474 U	CAP SAFETY 0.47U 20% A
	C907	67C 3015115K	150UF+-20% 450V
	C915	65C 2M103 3B	0.01UF 2KV 20% Z5U
	C929	67C 305331 7	330UF +-20% 50V
	C931	67C 215391GFK	390UF +-20% 80V ELITE
	C936	67C 305102 4	1000UF +-20% 25V
	C939	67C 309102 4	85 尼ん 1000UF +-20% 2
	C942	67C 309471 4	470UF +-20% 25V
!	C963	65C305M1022B2	1000PF 400VAC/250
	C964	65C305M1022B2	1000PF 400VAC/250
	C977	67C 70478 9T	0.47UF +-20% 100V
	CN902	33C3074 1	2P PLUG
	CN903	33C3803 3	WAFER EH-E
@	D429	93A3060 4	31DF6-FC
	D918	93A106050652T	SBYV26C
!	D922	93C30408AT	RG-4S
	D925	93C30408AT	RG-4S

	LOCATION	CMP773Z2NHPQ	SPECIFICATION
	P901	33C3278 2	2P PLUG B2B-XHA/JST
	PR901	61C 52459 3G	PTCR 4.5OHM +-20% 220V
	Q440	57C 767 2	STA524A
	Q907	57C 728 3	HSB772P/E
	Q909	57C 728 3	HSB772P/E
@	Q923	57C 498 1 T	BF423
	R183	93A 3951752T	TZX6V2C
	R426	61C153M180 59	MOFR 18 OHM +-5% 3W
	R428	61C153M228 59	MOFR 0.22 OHM +-5% 3W
	R455	61C152M220 64	22 OHM +-5% 2W
	R456	61C153M151 59	MOFR 150 OHM +-5% 3W
	R607	61C 208109 64	MOFR 1 OHM +-5% 1W
	R608	61C152M100 64	MOFR 10 OHM+-5% 2W
	R723	61C152M220 64	22 OHM +-5% 2W
	R907	61C 208681 64	MOFR 680 OHM +-5% 1W
	R921	61C152M339 64	MOFR 3.3 OHM+-5% 2W
	R927	61C153M333 59	MOFR 33 OHM+-5% 3W
	R929	61C152M188 64	MOFR 0.18 OHM 2W+-5%
	R936	61A 303228 64	FUSER 0.22OHM +-5% 1W
	R961	61C 208560 64	MOFR 56 OHM +-5% 1W
⚠	RY901	77C 260 5 4	RELAY
	SG489	62A 10 16 W	SPARK GAP
	T401	79C 167125 HB	DRIVER TRANSFORMER
⚠	T402	79AS762 1F1G	SAMPO FBT
	T403	79C 167124 H	DRIVER TRANSFORMER
	T901	80A 7611LS AG	TRANSFORMER
	TP901	9C 211 2	PIN 1.2X15MM
	TP902	9C 211 2	PIN 1.2X15MM
	VR701	75A 335303	HCFVR 30K OHM +-20%
	VR902	75A 335303	HCFVR 30K OHM +-20%
	VR903	75A 335101	HCFVR 100 OHM +-20%
	X101	93C 2243A PT	CRYSTAL
	X101GND	95C 90 23	JUMPER

PARTS LIST OF MAIN BOARD

	LOCATION	AMP773Z2NHPQ	SPECIFICATION
		6C 31 4	BRASS
		6C 31500	EYELET
		6C 31501	BRASS
		6C 31502	BRASS
⚠		715C 910 3HPQ	CMPC BOARD
	C103	65C 450104 7T	0.1UF +80-20% 50V Y5V
	C104	67C 309101 4T	100UF +-20% 25V
	C105	65C 450104 7T	0.1UF +80-20% 50V Y5V
	C106	67C 309330 7T	33UF +-20% 50V
	C108	65C 44222013T	22PF +-5% NPO 50V
	C113	65C 444101 5T	100 PF 10% 50V Y5P

LOCATION	CMP773Z2NHPQ	SPECIFICATION
C114	65C 444101 5T	100 PF 10% 50V Y5P
C130	65C 44210113T	100PF +-5% NPO 50V
C146	67C 305100 7T	10UF +-20% 50V
C160	65C 444101 5T	100 PF 10% 50V Y5P
C161	65C 442471 9T	470PF 50V
C162	65C 44410213T	1000PF +-10% Y5P 50V
C163	65C 444101 5T	100 PF 10% 50V Y5P
C164	65C 450104 7T	0.1UF +80-20% 50V Y5V
C168	65C 44210113T	100PF +-5% NPO 50V
C169	65C 44210113T	100PF +-5% NPO 50V
C402	65C 444332 5T	3300PF 10% 50V Y5P
C403	64C 44J2231AT	22NF 100V
C404	67C 305100 3T	10UF +-20% 16V
C406	65C 450104 7T	0.1UF +80-20% 50V Y5V
C407	65C 444101 5T	100 PF 10% 50V Y5P
C408	65C 444101 5T	100 PF 10% 50V Y5P
C409	64C700J1020AT	PEN 0.001UF/50V +-5%
C412	65C 44210113T	100PF +-5% NPO 50V
C413	67C 305100 7T	10UF +-20% 50V
C415	64C 44J1031AT	.01UF +-5% 100V
C416	65C 1K101 5T	100PF/1KV Y5P+-10%
C417	64C700J1040AT	0.1uF/50V +-5%
C429	65C 444332 5T	3300PF 10% 50V Y5P
C433	67C 309220 7T	22UF +-20% 50V
C434	67C 309479 3T	4.7UF +-20% 16V
C435	64C 44J1031AT	.01UF +-5% 100V
C437	67C 309229 7T	2.2UF +-20% 50V
C443	67C 309470 3T	47UF +-20% 16V
C444	65C 450104 7T	0.1UF +80-20% 50V Y5V
C446	65C 444101 5T	100 PF 10% 50V Y5P
C447	64C700J4720AT	4.7NF 100V +-5%
C449	64C700J4730AT	47NF 63V +-5%
C451	65C 1K101 5T	100PF/1KV Y5P+-10%
C462	65C 1K101 5T	100PF/1KV Y5P+-10%
C463	64C 44J1031AT	.01UF +-5% 100V
C466	64C176J823 1T	.082UF +-5% 100V
C467	67C 309100 7T	10UF +-20% 50V
C470	65C 444332 5T	3300PF 10% 50V Y5P
C483	67C 305221 3T	220UF +-20% 16V
C601	64C700J1040AT	0.1uF/50V +-5%
C602	64C178J102 1T	CL21X 1000PF 100V +-5%
C603	67C 309471 3T	470UF +-20% 16V
C604	64C178J224 1T	C121X 0.22UF 100V +-5%
C605	67C 309470 7T	47UF +-20% 50V
C606	67C 309471 3T	470UF +-20% 16V
C610	64C700J1040AT	0.1uF/50V +-5%
C611	64C701J4740AT	0.47UF 50V +-5%
C613	64C701J1540AT	0.15UF 50V +-5%
C614	65C 444101 5T	100 PF 10% 50V Y5P
C703	64C178J472 1T	4700PF 100V
C705	64C178J103 1T	CL21X 0.01UF 100V +-5%
C710	64C176J224 1T	0.22UF +-5% 100V
C712	67C 309109 7T	1.0UF +-20% 50V

	LOCATION	CMP773Z2NHPQ	SPECIFICATION
	C713	67C 30522912T	2.2UF +-20% 250V
	C720	65C 1K102 5T	1NF/1KV Y5P+-10%
	C740	67C 30510915T	1UF +-20% 450V
	C741	65C 444331 5T	330PF 10% 50V
	C743	67C 309100 7T	10UF +-20% 50V
	C908	65C 450104 7T	0.1UF +80-20% 50V Y5V
	C909	67C 305100 7T	10UF +-20% 50V
	C916	67C 305101 7T	100UF +-20% 50V
	C918	64C 44J3321AT	3300PF 100V PEI
	C920	64C 44J2221AT	2200PF 100V PEI
	C921	64C178J104 0T	CL21X0.1UF 63V +-5%
	C922	65C517M103 3T	10NF/500V Z5U +-20%
	C923	65C 2K221 5T	220PF 2000V
	C924	64C700J3320AT	3.3nF/50V +-5%
	C925	67C 309100 7T	10UF +-20% 50V
	C937	67C 309471 3T	470UF +-20% 16V
	C941	64C700J1040AT	0.1uF/50V +-5%
	C943	64C 44J1521AT	1500PF/100V
	C945	64C700J1040AT	0.1uF/50V +-5%
	C946	63C212J1042AT	MPE 0.1UF/250V +-5%
	C947	67C 309479 7T	4.7UF +-20% 50V
	C950	65C 1K221 5T	220PF/1KV Y5P+-10%
	C958	67C 309101 3T	100UF +-20% 16V
	C960	67C 309229 7T	2.2UF +-20% 50V
	C961	64C 44J6831AT	0.068UF 100V PEI
	C965	64C700J1030AT	0.01UF 50V +-5%
	C992	67C 309109 7T	1.0UF +-20% 50V
	D104	93A 64 1152T	DIODE 1N4148
	D106	93A 64 1152T	DIODE 1N4148
	D107	93A 64 1152T	DIODE 1N4148
	D130	93C1002 1W52T	1N5817
	D131	93C1002 1W52T	1N5817
	D152	93A 3951752T	TZX6V2C
	D153	93A 3951752T	TZX6V2C
	D160	93A 64 1152T	DIODE 1N4148
	D402	61C 21013252T	MFR 1.3K OHM +- 1% 1/6
	D403	93A 5247P52T	1N4004
	D404	93A 5247P52T	1N4004
@	D405	93C1002 1W52T	1N5817
@	D406	93C 6021P52T	PS156R
@	D407	93C 6021P52T	PS156R
	D409	93A 64 1152T	DIODE 1N4148
	D410	93A 64 1152T	DIODE 1N4148
⚠	D411	93C 6450152T	SWITCHING DIODE BAV21
	D412	93A 64 1152T	DIODE 1N4148
	D413	93C 6026T52T	RECTIFIER DIODE FR107
	D420	93A 64 1152T	DIODE 1N4148
	D431	93A 64 1152T	DIODE 1N4148
	D438	95C 90 23	JUMPER
	D440	93C 6021P52T	PS156R
	D450	93A 64 1152T	DIODE 1N4148
@	D463	93C 6026T52T	RECTIFIER DIODE FR107
@	D470	93C 6026T52T	RECTIFIER DIODE FR107

	LOCATION	AMP773Z2NHPQ	SPECIFICATION
	D471	93A 5247P52T	1N4004
@	D601	93A 5247P52T	1N4004
	D602	93A 64 1152T	DIODE 1N4148
	D603	93A 64 1152T	DIODE 1N4148
@	D704	93A 5212T52T	RECTIFIER DIODE 1N4007
@	D706	93C 6044T52T	RECTIFIER DIODE FR157S
	D721	95C 90 23	JUMPER
	D735	93A 64 1152T	DIODE 1N4148
@	D740	93C1040 252T	UF4004
@	D741	93C1040 252T	UF4004
@	D910	93C 6021P52T	PS156R
	D911	93C2020 552T	ER202
	D912	93A 64 1152T	DIODE 1N4148
	D913	93A 64 1152T	DIODE 1N4148
	D914	93A 64 1152T	DIODE 1N4148
	D917	93A 64 1152T	DIODE 1N4148
@	D923	93C2020 552T	ER202
	D926	93A 64 1152T	DIODE 1N4148
@	D929	93C1040 252T	UF4004
@	D930	93C1040 252T	UF4004
	D933	61C 17220252T	CFR 2KOHM+-5% 1/4W
	D939	93A 64 1152T	DIODE 1N4148
	D968	95C 90 23	JUMPER
	D977	93A 64 1152T	DIODE 1N4148
	D990	93A 64 1152T	DIODE 1N4148
	FB401	71C 55 9 T	CORE RF BEAD RH 3.5X6X
	FB402	95C 90 23	JUMPER
	FB403	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
	FB405	95C 90 23	JUMPER
	FB903	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
	FB904	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
	FB905	95C 90 23	JUMPER
	FB907	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
	J002	95C 90 23	JUMPER
	J003	95C 90 23	JUMPER
	J004	95C 90 23	JUMPER
	J005	95C 90 23	JUMPER
	J006	95C 90 23	JUMPER
	J008	95C 90 23	JUMPER
	J010	95C 90 23	JUMPER
	J012	95C 90 23	JUMPER
	J014	95C 90 23	JUMPER
	J017	95C 90 23	JUMPER
	J018	95C 90 23	JUMPER
	J019	95C 90 23	JUMPER
	J020	95C 90 23	JUMPER
	J021	95C 90 23	JUMPER
	J023	95C 90 23	JUMPER
	J024	95C 90 23	JUMPER
	J026	95C 90 23	JUMPER
	J027	95C 90 23	JUMPER
	J028	95C 90 23	JUMPER
	J031	95C 90 23	JUMPER
	J033	95C 90 23	JUMPER

LOCATION	AMP773Z2NHPQ	SPECIFICATION
J034	95C 90 23	JUMPER
J035	95C 90 23	JUMPER
J036	95C 90 23	JUMPER
J038	95C 90 23	JUMPER
J039	95C 90 23	JUMPER
J040	95C 90 23	JUMPER
J041	95C 90 23	JUMPER
J042	95C 90 23	JUMPER
J043	95C 90 23	JUMPER
J044	95C 90 23	JUMPER
J045	95C 90 23	JUMPER
J046	95C 90 23	JUMPER
J047	95C 90 23	JUMPER
J048	95C 90 23	JUMPER
J049	95C 90 23	JUMPER
J050	95C 90 23	JUMPER
J051	95C 90 23	JUMPER
J053	95C 90 23	JUMPER
J055	95C 90 23	JUMPER
J056	95C 90 23	JUMPER
J057	95C 90 23	JUMPER
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J062	95C 90 23	JUMPER
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J066	95C 90 23	JUMPER
J068	95C 90 23	JUMPER
J069	95C 90 23	JUMPER
J070	95C 90 23	JUMPER
J072	95C 90 23	JUMPER
J073	95C 90 23	JUMPER
J074	95C 90 23	JUMPER
J075	95C 90 23	JUMPER
J076	95C 90 23	JUMPER
J077	95C 90 23	JUMPER
J078	95C 90 23	JUMPER
J079	95C 90 23	JUMPER
J080	95C 90 23	JUMPER
J082	95C 90 23	JUMPER
J083	95C 90 23	JUMPER
J085	95C 90 23	JUMPER
J086	61C 21091352T	MFR 91KOHM +-1% 1/6W
J087	95C 90 23	JUMPER
J088	95C 90 23	JUMPER
J089	95C 90 23	JUMPER
J090	95C 90 23	JUMPER
J091	95C 90 23	JUMPER
J092	95C 90 23	JUMPER
J093	95C 90 23	JUMPER
J094	95C 90 23	JUMPER
J095	95C 90 23	JUMPER

	LOCATION	AMP773Z2NHPQ		SPECIFICATION
	J096	95C	90 23	JUMPER
	J098	95C	90 23	JUMPER
	J1	95C	90 23	JUMPER
	J101	95C	90 23	JUMPER
	J109	95C	90 23	JUMPER
	J111	95C	90 23	JUMPER
	J113	95C	90 23	JUMPER
	J116	95C	90 23	JUMPER
	J117	95C	90 23	JUMPER
	J118	95C	90 23	JUMPER
	J119	95C	90 23	JUMPER
	J120	95C	90 23	JUMPER
	J121	95C	90 23	JUMPER
	J123	95C	90 23	JUMPER
	J125	95C	90 23	JUMPER
	J128	95C	90 23	JUMPER
	J130	95C	90 23	JUMPER
	J131	95C	90 23	JUMPER
	J132	95C	90 23	JUMPER
	J133	95C	90 23	JUMPER
	J135	95C	90 23	JUMPER
	J136	95C	90 23	JUMPER
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	J143	95C	90 23	JUMPER
	J147	95C	90 23	JUMPER
	J149	95C	90 23	JUMPER
	J151	95C	90 23	JUMPER
	J152	95C	90 23	JUMPER
	J153	95C	90 23	JUMPER
	J156	95C	90 23	JUMPER
	J157	95C	90 23	JUMPER
	J158	95C	90 23	JUMPER
	J159	95C	90 23	JUMPER
	J160	95C	90 23	JUMPER
	J161	95C	90 23	JUMPER
	J163	95C	90 23	JUMPER
	J164	95C	90 23	JUMPER
	J166	95C	90 23	JUMPER
	J167	95C	90 23	JUMPER
	J168	95C	90 23	JUMPER
	J2	95C	90 23	JUMPER
	J220	95C	90 23	JUMPER
	J221	95C	90 23	JUMPER
	JW1	95C	90 23	JUMPER
	JW2	95C	90 23	JUMPER
	JW4	95C	90 23	JUMPER
	JW5	95C	90 23	JUMPER
	JW6	95C	90 23	JUMPER
@	L101	73C	5333910T	3.3UH +-10%
	L903	95C	90 23	JUMPER

	LOCATION	AMP773Z2NHPQ	SPECIFICATION
	Q401	57C 419 P T	TRAN 2SC945P/NEC TAPIN
@	Q402	57C 731 1A T	2SK2962
@	Q404	57C 420502 T	2SA733P
@	Q405	57C 420502 T	2SA733P
	Q410	57C 521 1 T	2SD667ACTZ-E
	Q419	57C 419503 T	2SC945P
@	Q705	57C 498 1 T	BF423
	Q735	57C 498 1 T	BF423
@	Q742	57C 708 1 T	2SC4002E
@	Q902	57C 446 1 T	2SC1213ACTZ-E
@	Q903	57C 419503 T	2SC945P
@	Q905	57C 420502 T	2SA733P
@	Q906	57C 446 1 T	2SC1213ACTZ-E
	Q908	57C 419 P T	TRAN 2SC945P/NEC TAPIN
	Q910	57C 419 P T	TRAN 2SC945P/NEC TAPIN
@	Q912	57C 419 P T	TRAN 2SC945P/NEC TAPIN
@	Q913	57C 419503 T	2SC945P
@	Q918	57C 446 3 T	2SC2120-Y
@	Q920	57C 420 P T	TRAN 2SA733P/NEC TAPIN
	Q931	57C 419 P T	TRAN 2SC945P/NEC TAPIN
	Q977	57C 721 1 T	DTC114ESA
	Q990	57C 419 P T	TRAN 2SC945P/NEC TAPIN
	R100	61C 60247252T	CFR 4.7K OHM+-5% 1/6W
	R101	61C 60210252T	CFR 1K OHM+-5% 1/6W
	R106	61C 60230352T	CFR 30K OHM+-5% 1/6W
	R108	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R109	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R110	61C 17210152T	CFR 100OHM+-5% 1/4W
	R111	61C 17210152T	CFR 100OHM+-5% 1/4W
	R112	61C 60262252T	CFR 6.2K OHM +-5% 1/6W
	R116	95C 90 23	JUMPER
	R117	61C 60210152T	CFR 100 OHM+-5% 1/6W
	R118	95C 90 23	JUMPER
	R123	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R124	61C 60215252T	CFR 1.5K OHM +-5% 1/6W
	R125	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R132	61C 60210152T	CFR 100 OHM+-5% 1/6W
	R134	61C 60251252T	CFR 5.1K OHM+-5% 1/6W
	R135	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R140	93A 3951752T	TZX6V2C
	R141	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R143	61C 60210152T	CFR 100 OHM+-5% 1/6W
	R144	61C 21075352T	75KOHM 1/6W
	R150	61C 60222252T	CFR 2.2K OHM +-5% 1/6W
	R152	61C 60233252T	CFR 3.3K OHM+-5% 1/6W
	R153	61C 60233252T	CFR 3.3K OHM+-5% 1/6W
	R156	61C 60247252T	CFR 4.7K OHM+-5% 1/6W
	R157	61C 60247252T	CFR 4.7K OHM+-5% 1/6W
	R172	61C 60210152T	CFR 100 OHM+-5% 1/6W
	R179	61C175L22252T	CFR 2.2K OHM +-5% 1/2W
	R180	61C 17215152T	CFR 150 OHM +-5% 1/4W
	R181	95C 90 23	JUMPER
	R186	61C 60220252T	CFR 2K OHM+-5% 1/6W
	R401	61C175L10052T	CFR 10 OHM +-5% 1/2W

LOCATION	AMP773Z2NHPQ	SPECIFICATION
R402	61C 17230252T	CFR 3KOHM+-5% 1/4W
R403	61C 60210152T	CFR 100 OHM+-5% 1/6W
R404	61C 60210152T	CFR 100 OHM+-5% 1/6W
R405	61C 60210152T	CFR 100 OHM+-5% 1/6W
R406	61C 60210152T	CFR 100 OHM+-5% 1/6W
R410	61C 60210352T	CFR 10K OHM+-5% 1/6W
R411	61C 60218252T	CFR 1.8K OHM+-5% 1/6W
R412	61C 21047252T	MFR 4.7K OHM +- 1% 1/6
R413	61C 21030252T	MFR 3K OHM +- 1% 1/6W
R415	61C 60215252T	CFR 1.5K OHM +-5% 1/6W
R416	61C 17213352T	CFR 13K OHM +-5% 1/4W
R417	61C 21030252T	MFR 3K OHM +- 1% 1/6W
R418	61C 20047252T	MFR 4.7KOHM+-1% 1/4W
R420	61C 60247252T	CFR 4.7K OHM+-5% 1/6W
R421	61C 17210052T	CFR 10OHM+-5% 1/4W
R422	61C 60210152T	CFR 100 OHM+-5% 1/6W
R423	61C 60220352T	CFR 20K OHM+-5% 1/6W
R424	61C 17210052T	CFR 10OHM+-5% 1/4W
R425	61C 17239052T	CFR 39 OHM +-5% 1/4W
R427	61C175L22052T	CFR 22 OHM +-5% 1/2W
R429	61C175L10052T	CFR 10 OHM +-5% 1/2W
R430	61C 17282352T	CFR 82KOHM+-5% 1/4W
R431	61C 17262252T	CFR 6.2K OHM +-5% 1/4W
R432	61C 60210352T	CFR 10K OHM+-5% 1/6W
R433	61C 17210252T	CFR 1KOHM +-5% 1/4W
R434	61C 21039252T	MFR 3.9K OHM +- 1% 1/6
R435	61C 17210452T	CFR100K OHM +-5% 1/4W
R436	61C 60210252T	CFR 1K OHM+-5% 1/6W
R439	61C 17247252T	CFR 4.7K OHM +-5% 1/4W
R440	61C 20033252T	MFR 3.3KOHM+-1% 1/4W
R441	61C 20482352T	MFR 82KOHM+-2% 1/2W
R443	95C 90 23	JUMPER
R444	95C 90 23	JUMPER
R446	95C 90 23	JUMPER
R447	95C 90 23	JUMPER
R448	61C 17291152T	CFR 910OHM+-5% 1/4W
R449	95C 90 23	JUMPER
R459	95C 90 23	JUMPER
R460	61C 17247252T	CFR 4.7K OHM +-5% 1/4W
R462	61C 60247352T	CFR 47K OHM+-5% 1/6W
R463	61C 17220552T	CFR 2MOHM+-5% 1/4W
R467	61C 60210352T	CFR 10K OHM+-5% 1/6W
R471	61C 17210452T	CFR100K OHM +-5% 1/4W
R472	61C 17222452T	CFR 220KOHM+-5% 1/4W
R473	61C 17247252T	CFR 4.7K OHM +-5% 1/4W
R474	61C 17210452T	CFR100K OHM +-5% 1/4W
R475	61C 17210052T	CFR 10OHM+-5% 1/4W
R476	61C 17222452T	CFR 220KOHM+-5% 1/4W
R479	61C 17222452T	CFR 220KOHM+-5% 1/4W
R480	95C 90 23	JUMPER
R496	95C 90 23	JUMPER
R497	95C 90 23	JUMPER
R601	61C 17124352T	CFR 24KOHM +-2% 1/4W

	LOCATION	AMP773Z2NHPQ	SPECIFICATION
	R602	61C 17239252T	CFR 3.9K OHM +-5% 1/4W
	R603	61C 17212352T	CFR 12K OHM +-5% 1/4W
	R604	61C 20056252T	MFR 5.6KOHM+-1% 1/4W
	R605	61C175L15952T	CFR 1.5 OHM +-5% 1/2W
	R606	61C175L15152T	CFR 150 OHM+-5% 1/2W
	R609	61C 20010452T	100KOHM 1/4W
	R610	61C 17212452T	CFR 120K OHM +-5% 1/4W
	R611	61C 21085352T	MFR 85KOHM +-1% 1/6W
	R612	61C 17247352T	CFR 47K OHM +-5% 1/4W
	R613	61C 17210252T	CFR 1KOHM +-5% 1/4W
	R615	61C 17212452T	CFR 120K OHM +-5% 1/4W
	R616	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R617	61C 21018452T	MFR 180K OHM +- 1% 1/6
	R619	61C 21019452T	MFR 190K OHM +- 1% 1/6
	R620	61C 58301 WT	NTCR 300OHM +-5%3800K
	R702	61C 17210152T	CFR 100OHM+-5% 1/4W
	R712	61C 60233152T	CFR 330 OHM+-5% 1/6W
	R713	61C 60256252T	CFR 5.6KOHM+-5% 1/6W
	R715	61C 17251352T	CFR 51K OHM +-5% 1/4W
	R721	61C175L10252T	CFR 1K OHM +-5% 1/2W
	R722	61C 60282252T	CFR 8.2K OHM +-5% 1/6W
	R725	61A212Y75352T	75KOHM 1/2W
	R726	61C 60210252T	CFR 1K OHM+-5% 1/6W
	R730	61C175L10952T	CFR 1 OHM +-5% 1/2W
	R734	61C 17268352T	CFR 68K OHM +-5% 1/4W
	R735	61A212Y13452T	MGFR 130K OHM +-5% 1/2
	R738	61C175L10252T	CFR 1K OHM +-5% 1/2W
	R740	61C175L56352T	CFR 56K OHM +-5% 1/2W
	R741	61C175L56352T	CFR 56K OHM +-5% 1/2W
	R746	61C175L10552T	CFR 1M OHM +-5% 1/2W
	R747	61C175L56352T	CFR 56K OHM +-5% 1/2W
	R748	61C 60291252T	9.1K OHM +-5% 1/6W
	R749	61C 60210452T	CFR 100K OHM+-5% 1/6W
	R750	95C 90 23	JUMPER
	R751	61C 60247152T	CFR 470 OHM +-5% 1/6W
	R776	61C 17210252T	CFR 1KOHM +-5% 1/4W
⚠	R901	61C175L47452T	CFR 470K OHM +-5% 1/2W
	R902	61C 60247252T	CFR 4.7K OHM+-5% 1/6W
	R903	61C175L47252T	CFR 4.7K OHM +-5% 1/2W
	R904	61C 17211952T	CFR 1.1 OHM +-5% 1/4W
	R905	61C 60262252T	CFR 6.2K OHM +-5% 1/6W
	R906	61C 17233052T	CFR 33OHM+-5% 1/4W
	R908	61C175L15052T	CFR 15 OHM +-5% 1/2W
	R909	61C 17210152T	CFR 100OHM+-5% 1/4W
	R910	61C 60251352T	CFR 51K OHM +-5% 1/6W
	R911	95C 90 23	JUMPER
	R912	61C175L33352T	CFR 33K OHM +-5% 1/2W
	R914	61C 17210252T	CFR 1KOHM +-5% 1/4W
	R915	61C 17215252T	CFR 1.5K OHM +-5% 1/4W
	R917	61A212Y47452T	MGFR 470KOHM +-5% 1/2W
	R918	61A212Y47452T	MGFR 470KOHM +-5% 1/2W
	R919	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R923	61A212Y82352T	MGFR 82K OHM +-5% 1/2W

	LOCATION	AMP773Z2NHPQ	SPECIFICATION
	R928	61A212Y82352T	MGFR 82K OHM +-5% 1/2W
	R930	61C 17210252T	CFR 1KOHM +-5% 1/4W
	R931	61C 20010952T	MFR 1OHM+-1% 1/4W
	R932	61A212Y18452T	MGFR 180K OHM +-5% 1/2
	R933	61C 60210252T	CFR 1K OHM+-5% 1/6W
	R934	61C 60212252T	CFR 1.2K OHM+-5% 1/6W
	R937	61C 17215152T	CFR 150 OHM +-5% 1/4W
	R938	61C 17222052T	CFR 22OHM+-5% 1/4W
	R939	61C 17220352T	CFR 20KOHM+-5% 1/4W
	R941	61C 17215152T	CFR 150 OHM +-5% 1/4W
	R942	61C 17268052T	CFR 68 OHM +-5% 1/4W
	R943	61C 17233452T	CFR 330K OHM +-5% 1/4W
	R944	61C 17251252T	CFR 5.1K OHM +-5% 1/4W
	R946	61C 17139352T	CFR 39K OHM +-2% 1/4W
	R950	61C 60218252T	CFR 1.8K OHM+-5% 1/6W
	R951	61C 17222152T	CFR 220OHM+-5% 1/4W
	R952	61C 17247352T	CFR 47K OHM +-5% 1/4W
	R953	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R955	71C 55 29	FERRITE BEAD
	R957	61C 17247352T	CFR 47K OHM +-5% 1/4W
	R958	61C 17215252T	CFR 1.5K OHM +-5% 1/4W
	R959	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R960	61C 17247352T	CFR 47K OHM +-5% 1/4W
	R962	61C 17210152T	CFR 100OHM+-5% 1/4W
	R965	61C 17210052T	CFR 10OHM+-5% 1/4W
	R966	61C 17230252T	CFR 3KOHM+-5% 1/4W
	R967	61C 17227452T	CFR 270KOHM+-5% 1/4W
	R968	61C 17212452T	CFR 120K OHM +-5% 1/4W
	R969	61A214Y91352T	MGFR 91K OHM +-5% 1/4W
	R970	95C 90 23	JUMPER
	R972	61C 17222352T	CFR 22KOHM+-5% 1/4W
	R979	61C 17215152T	CFR 150 OHM +-5% 1/4W
	R980	61C 17222152T	CFR 220OHM+-5% 1/4W
	R981	61C175L22052T	CFR 22 OHM +-5% 1/2W
	R982	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R983	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R985	61C 17233152T	CFR 330OHM+-5% 1/4W
!	R986	61A212Y10652T	10MOHM +-5% 1/2W
	R993	61C 17210352T	CFR 10KOHM +-5% 1/4W
	R994	61C 17220352T	CFR 20KOHM+-5% 1/4W
	R995	61C 17239352T	CFR 39K OHM +-5% 1/4W
	R996	61C 60210352T	CFR 10K OHM+-5% 1/6W
	ZD1	93A 3951752T	TZX6V2C
	ZD106	93A 3951752T	TZX6V2C
	ZD107	93A 3951752T	TZX6V2C
	ZD400	93C 3911452T	HZ33-1-E
	ZD401	93C 3952952T	HZ2B2-E
	ZD601	93C 39 7752T	HZ5C1-E
	ZD701	93C 39 7752T	HZ5C1-E
!	ZD901	93C 3952252T	TZX20B
	ZD902	93C 396V1 V	TZX6V2B
	ZD905	93A 3951752T	TZX6V2C

PARTS LIST OF CRT PC BOARD

	LOCATION	CRP773Z2NHPQ	SPECIFICATION
		ARP773Z2NH	CRT BOARD P773Z-2HPQ
		40C 45762412B	LABEL
⚠		87C3504 ZW	CRT COCKET(QQ FOCUS)
		705A773ZR5601H	IC802 ASS'Y
		705A773ZR85 1H	SHIELD ASS'Y
	C828	64C178J104 2T	.1UF 250V
	C829	67C 305470 9	47UF +-20% 100V
	C833	65C 2Z103 4B	0.01UF +80%-20% 2K Z5V
	C835	65C 2K4701FT	47PF 2KV
	C866	65C 2K4701FT	47PF 2KV
	C870	67C 305470 9	47UF +-20% 100V
	FB801	53A 40 8	FILTER
	FB802	53A 40 8	FILTER
	FB804	53A 40 8	FILTER
	FB805	71C 55 21	FERRITE BEAD 10*6.0*0.
	FB810	71C 55 21	FERRITE BEAD 10*6.0*0.
	FR822	71C 55 2	FERRITE BEAD 6.5*5*1.7
	FR879	71C 55 2	FERRITE BEAD 6.5*5*1.7
	G2	9C 203 8	BRASS PIN
	IC801	56C 366507	LM1237BDKD/NA
@	IC803	56C 539 6	LM2480NA/NOPB
	J813	71C 55 9 T	CORE RF BEAD RH 3.5X6X
	L809	71C 55 9 T	CORE RF BEAD RH 3.5X6X
	P801	33C327812D	WAFER*PLUG
	P802	33C327812D	WAFER*PLUG
	P803	33C3278 6D	WAFER
	R808	61C 208100 64	MOFR 10OHM+-5% 1W
	R822	61C 208101 64	MOFR 100OHM+-5% 1W
	R879	61C152M101 64	MOFR 100OHM+-5% 2W
	R880	61C175L10452T	CFR 100K OHM +-5% 1/2W

PARTS LIST OF CRT AUTO INS. PC BOARD

	LOCATION	ARP773Z2NHPQ	SPECIFICATION
		6C 31 4	BRASS
⚠		715C1213 1HPQ	CRPC
	C801	67C 305109 7T	1UF +-20% 50V
	C802	67C 305109 7T	1UF +-20% 50V
	C803	67C 305109 7T	1UF +-20% 50V
	C805	95C 90 23	JUMPER
	C808	65C 44256013T	56PF +-5% NPO 50V
	C809	67C 305100 7T	10UF +-20% 50V
	C810	67C 305470 7T	47UF +-20% 50V
	C811	65C 44210113T	100PF +-5% NPO 50V
	C812	65C 44210113T	100PF +-5% NPO 50V

	LOCATION	ARP773Z2NHPQ	SPECIFICATION
	C823	65C 4501047TV	0.1UF +80-20% 50V
	C824	65C 4501047TV	0.1UF +80-20% 50V
	C830	65C 1K101 5T	100PF/1KV Y5P+-10%
	C831	65C517M103 3T	10NF 500V
	C834	65C 450103 3T	0.01UF +80-20% 50V
	C835	65C 2K102 5T	1000PF/2KV
	C837	65C 1K102 5T	1NF/1KV Y5P+-10%
	C840	65C 1K101 5T	100PF/1KV Y5P+-10%
	C841	65C 1K101 5T	100PF/1KV Y5P+-10%
	C843	65C 44210113T	100PF +-5% NPO 50V
	C844	65C 44210013T	10PF +-5% NPO 50V
	C845	65C 44210013T	10PF +-5% NPO 50V
	C846	65C 44210113T	100PF +-5% NPO 50V
	C847	64C176J563 1T	0.056UF 100V MPE
	C848	65C 44210113T	100PF +-5% NPO 50V
	C849	65C 4501047TV	0.1UF +80-20% 50V
	C850	67C 305470 4T	47UF +-20% 25V
	C851	67C 305470 4T	47UF +-20% 25V
	C852	65C 4501047TV	0.1UF +80-20% 50V
	C853	67C 70109 9T	1UF +-20% 100V
	C854	67C 70109 9T	1UF +-20% 100V
	C855	67C 70109 9T	1UF +-20% 100V
	C856	65C 550104 7T	0.1u 100V
	C857	65C 550104 7T	0.1u 100V
	C858	65C 550104 7T	0.1u 100V
	C860	65A517K102 5T	1000PF 500V +-10% Y5P
	C861	65C 450103 7T	10000PF/50V Y5V +80% -
	C862	65C 1K101 5T	100PF/1KV Y5P+-10%
	C863	65C 44410213T	1000PF +-10% Y5P 50V
	C864	65C 1K101 5T	100PF/1KV Y5P+-10%
	C865	65C 44210013T	10PF +-5% NPO 50V
	C866	65C 1K102 5T	1NF/1KV Y5P+-10%
	C867	65C 1K102 5T	1NF/1KV Y5P+-10%
	C868	65C 1K101 5T	100PF/1KV Y5P+-10%
	C871	65C 450104 7T	0.1UF +80-20% 50V Y5V
	C876	65C 44410313T	10000PF +-10% Z5P 50V
	D801	93A 64 1152T	DIODE 1N4148
	D802	93A 64 1152T	DIODE 1N4148
	D803	93A 64 1152T	DIODE 1N4148
	D804	93A 64 1152T	DIODE 1N4148
	D805	93A 64 1152T	DIODE 1N4148
	D806	93A 64 1152T	DIODE 1N4148
	D810	95C 90 23	JUMPER
@	D817	93C 52 9T52T	2A 600V 2A05
	D850	93C 6431T52T	BAV20
	D851	93C 6431T52T	BAV20
	D852	93C 6431T52T	BAV20
	D853	93C 6431T52T	BAV20
⚠	D854	93C 6431T52T	BAV20
	D855	93C 6431T52T	BAV20
	D856	93C 6431T52T	BAV20
	D857	93C 6431T52T	BAV20
	D858	93C 6431T52T	BAV20

LOCATION	ARP773Z2NHPQ	SPECIFICATION
FB803	71C 55 9 T	CORE RF BEAD RH 3.5X6X
FB850	71C 55 9 T	CORE RF BEAD RH 3.5X6X
J801	71C 55 9 T	CORE RF BEAD RH 3.5X6X
J802	95C 90 23	JUMPER
J803	95C 90 23	JUMPER
J809	71C 55 9 T	CORE RF BEAD RH 3.5X6X
J810	95C 90 23	JUMPER
J811	95C 90 23	JUMPER
J814	95C 90 23	JUMPER
J815	95C 90 23	JUMPER
J817	95C 90 23	JUMPER
J818	95C 90 23	JUMPER
J830	95C 90 23	JUMPER
L801	73C 5422810T	0.22UH +-10%
L802	73C 5422810T	0.22UH +-10%
L803	73C 5422810T	0.22UH +-10%
L804	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
L808	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
L850	73C 5447810T	0.47UH +-10% peaking c
L851	73C 5447810T	0.47UH +-10% peaking c
L852	73C 5447810T	0.47UH +-10% peaking c
R801	61C 21075052T	75OHM 1/6W
R802	61C 21075052T	75OHM 1/6W
R803	61C 21075052T	75OHM 1/6W
R804	61C 60233052T	CFR 33 OHM +-5% 1/6W
R805	61C 60233052T	CFR 33 OHM +-5% 1/6W
R806	61C 60233052T	CFR 33 OHM +-5% 1/6W
R807	61C 60210252T	CFR 1K OHM+-5% 1/6W
R809	61C 21010352T	MFR 10K OHM +- 1% 1/6W
R813	61C 21039252T	MFR 3.9K OHM +- 1% 1/6
R814	61C 60210152T	CFR 100 OHM+-5% 1/6W
R815	61C 60210152T	CFR 100 OHM+-5% 1/6W
R818	61C 60282152T	CFR 820 OHM +-5% 1/6W
R820	61C 60262252T	CFR 6.2K OHM +-5% 1/6W
R821	61C 17215252T	CFR 1.5K OHM +-5% 1/4W
R823	61C 60220352T	CFR 20K OHM+-5% 1/6W
R824	61C 60220352T	CFR 20K OHM+-5% 1/6W
R825	61C 60220352T	CFR 20K OHM+-5% 1/6W
R827	61C 60210252T	CFR 1K OHM+-5% 1/6W
R830	61C 60247252T	CFR 4.7K OHM+-5% 1/6W
R835	71C 55 19 T	FERRITE BEAD 9X3.5X0.8
R854	61C 17210152T	CFR 100OHM+-5% 1/4W
R855	61C 17210152T	CFR 100OHM+-5% 1/4W
R856	61C 17210152T	CFR 100OHM+-5% 1/4W
R857	61C 17222452T	CFR 220KOHM+-5% 1/4W
R858	61C 17222452T	CFR 220KOHM+-5% 1/4W
R859	61C 17222452T	CFR 220KOHM+-5% 1/4W
R872	61C175L33052T	CFR 33OHM +-5% 1/2W
R873	61C175L33052T	CFR 33OHM +-5% 1/2W
R874	61C175L33052T	CFR 33OHM +-5% 1/2W
ZD801	93C 39 7352T	HZ6B1-E
ZD810	93C 39 5252T	HZ5C2-E

PARTS LIST OF IC802 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		2C6003 1	SCREW NUT
		90C6026 12	HEAT SINK
		M1C1730 8128	SCREW M3x8
	IC802	56C 551 11	LM2466TA

PARTS LIST OF IC601 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		5C 71 1	TRANSISTOR HOUSING
		32C3028504	MICA
		90C 376 1	HEAT SINK
		M1C1730 12128	SCREW
@	IC601	56C 574501	E-STV9302A

PARTS LIST OF Q403/Q406/D408 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		5C 71 1	TRANSISTOR HOUSING
		32C3028504	MICA
		90C6055 1	HEAT SINK
		M1C1030 6128	SCREW
		M1C1130 8128	SCREW 3.0X8
		M1C1730 10128	SCREW M3x10
		M1C1730 12128	SCREW
	D408	93A 220 10	FMP-G2FS/SANKEN
	HV1	95C205T 30052	M95
	Q403	57C 706509	2SC5914
@	Q406	57C 415 1	TR.NPN TIP122/FAIRCHIL

PARTS LIST OF Q911 ASS'Y

LOCATION	PARTS No.	SPECIFICATION
	2C6003 1	SCREW NUT
	5C 42501	WASHER
	32C3028 8	MICA
	90C 231 6	HEAT SINK
	M1C1730 8128	SCREW M3x8
Q911	57C 600 27	IRF634B

PARTS LIST OF Q901 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		90C 348515	HEAT SINK
		M1C1730 10128	SCREW M3x10
⚠	Q901	57C 724 6	STP7NC70ZFP

PARTS LIST OF AC ASS'Y

LOCATION	PARTS No.	SPECIFICATION
	15C5659503	REAR BRACKET
	B1C1140 6128	SCREW

PARTS LIST OF SHIED ASS'Y

LOCATION	PARTS No.	SPECIFICATION
	85C6083 1	SHIELD
	85C6084 1	SHIELD
	M1C1030 5128	SCREW

PARTS LIST OF AC SOCKET ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
⚠		87C 501 6	AC SOCKET
	CN901	95C 800 2 2C	WIRE & CORE

PARTS LIST OF CPU ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
	IC101	56A1125540 A	6132-N400A0-151B
⚠	IC102	56C1133 13	24LC08B/PG

PARTS LIST OF D919 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		90C 360501	HEAT SINK
⚠	D919	93C30408AT	RG-4S

PARTS LIST OF NR901 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		9C 203 9	PIN
⚠	NR901	61C 58 8T L	NTCR 15OHM+-15%2.5A TH

PARTS LIST OF F901 ASS'Y

	LOCATION	PARTS No.	SPECIFICATION
		84C 33 10	FUSE CLIP
⚠	F901	84A 7H400 SL	FUSE 4A 250V LF-618 00

PARTS LIST OF CRT ALTERNATION

LOCATION	PARTS No.	SPECIFICATION
	750A5X182AV	CPT 17" RF 0.13 P1 CRT
C450	65C 1K221 5T	220PF/1KV Y5P+-10%
C480	65C 1K101 5T	100PF/1KV Y5P+-10%
R490	61C 21025352T	MFR 25KOHM +-1% 1/6W
TP403	95C201M 5014D	WIRE HARNESS

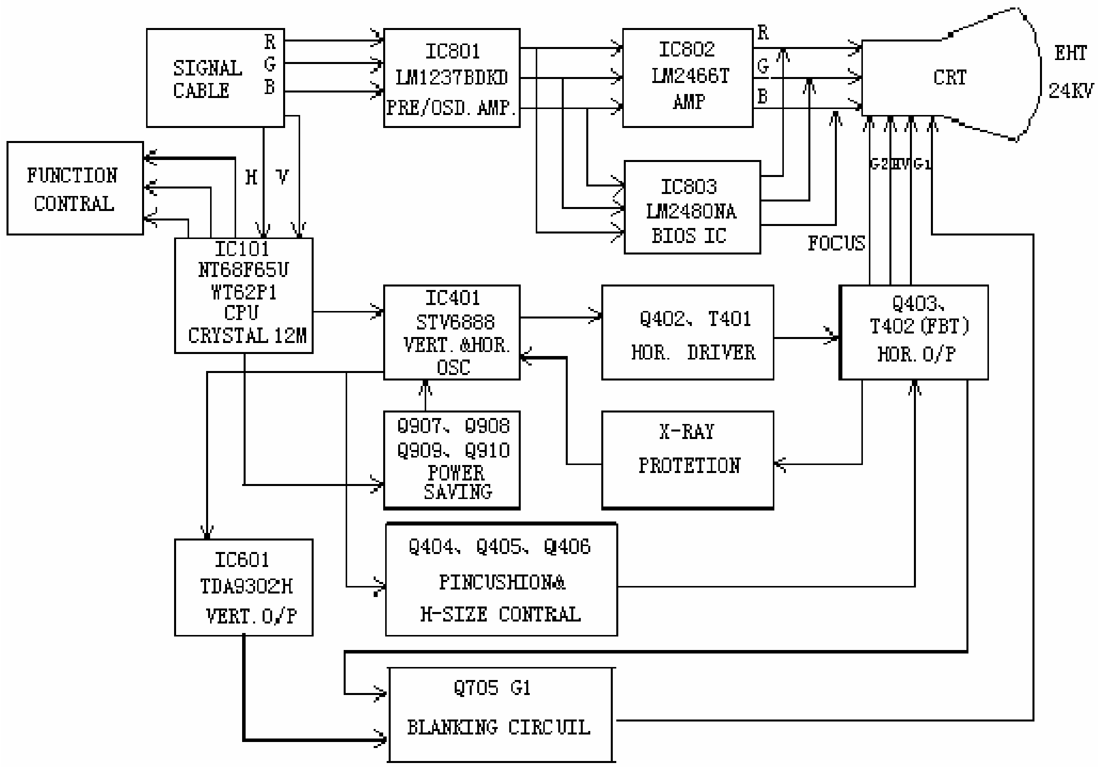
PARTS LIST OF CRT ALTERNATION

LOCATION	PARTS No.	SPECIFICATION
	750A5X182AV	CPT 17" RF 0.13 P1 CRT
C450	95C 90 23	JUMPER
C480	65C 1K101 5T	100PF/1KV Y5P+-10%
R490	61C 21025352T	MFR 25KOHM +-1% 1/6W
TP403	95C201F 5016D	WIRE HARNESS

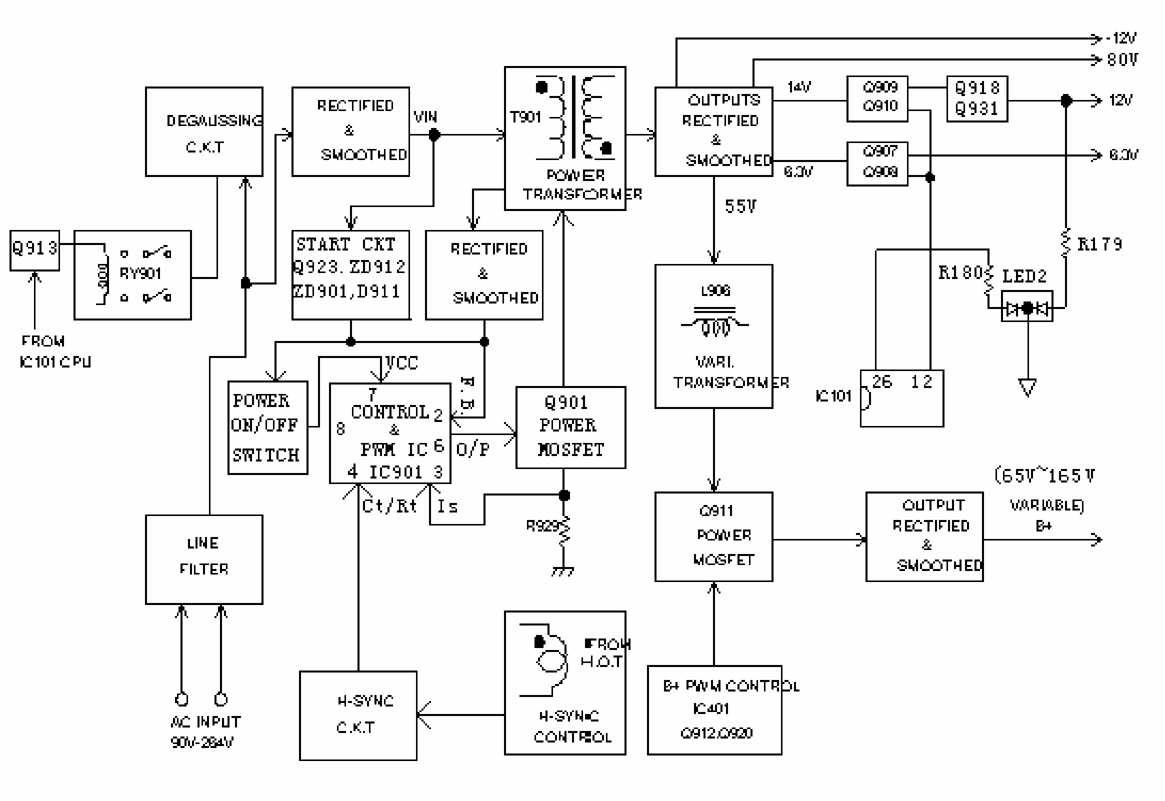
PARTS LIST OF KEY BOARD ALTERNATION

	LOCATION	PARTS No.	SPECIFICATION
		CKP773Z2NH	KEY BOARD P773Z-2HPQ
		CPP773Z2NH	POWER BOARD P773Z-2HPQ
		33C3598 1	ABS PLASTIC (S.W CAP)
		33C4731 Y A	POWER HOLDER
		Q1C1830 10128	SCREW
		AKP773Z2NH	AKPC BOARD P773Z-2HPQ
	H101	95C8013 3520	WIRE HARNESS
	SW101	77A 600 1GHJ	KEY SWITCH
	SW102	77A 600 1GHJ	KEY SWITCH
	SW103	77A 600 1GHJ	KEY SWITCH
⚠ !		715C1252 1KEY	KEY BOARD
	R101	61C 60220252T	CFR 2K OHM+-5% 1/6W
	R102	61C 60233152T	CFR 330 OHM+-5% 1/6W
	R103	61C 60215252T	CFR 1.5K OHM +-5% 1/6W
⚠ !		715C1252 2PWR	PWPC
	H102	95C8013 2519	WIRE
	H103	95C8013 5609	WIRE
	H104	33C3278 3	WAFER&PLUG
	LED1	81C 11 BY GP	LED
⚠ !	SW901	77C411A 2 CJ	MINI PUSH SWITCH
	ZD101	93C 3951352T	HZ6C2-E

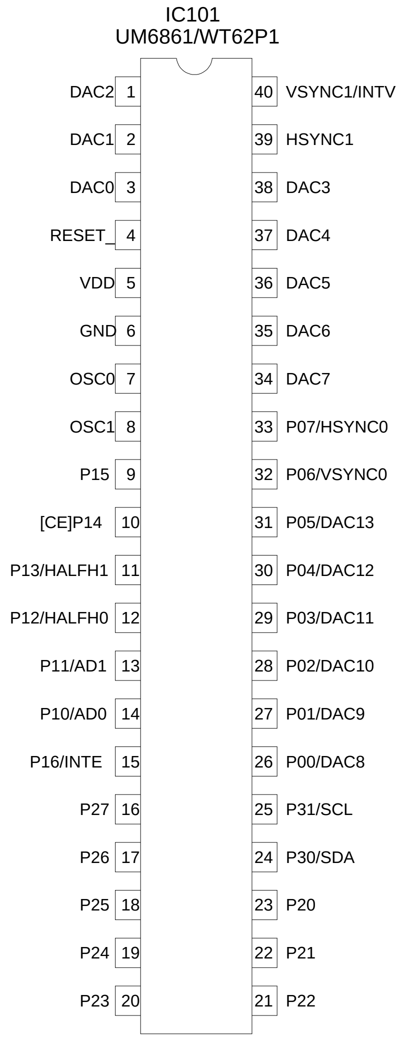
8. BLOCK DIAGRAM

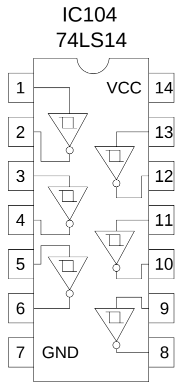


9-1 BLOCK DIAGRAM (SMPS)

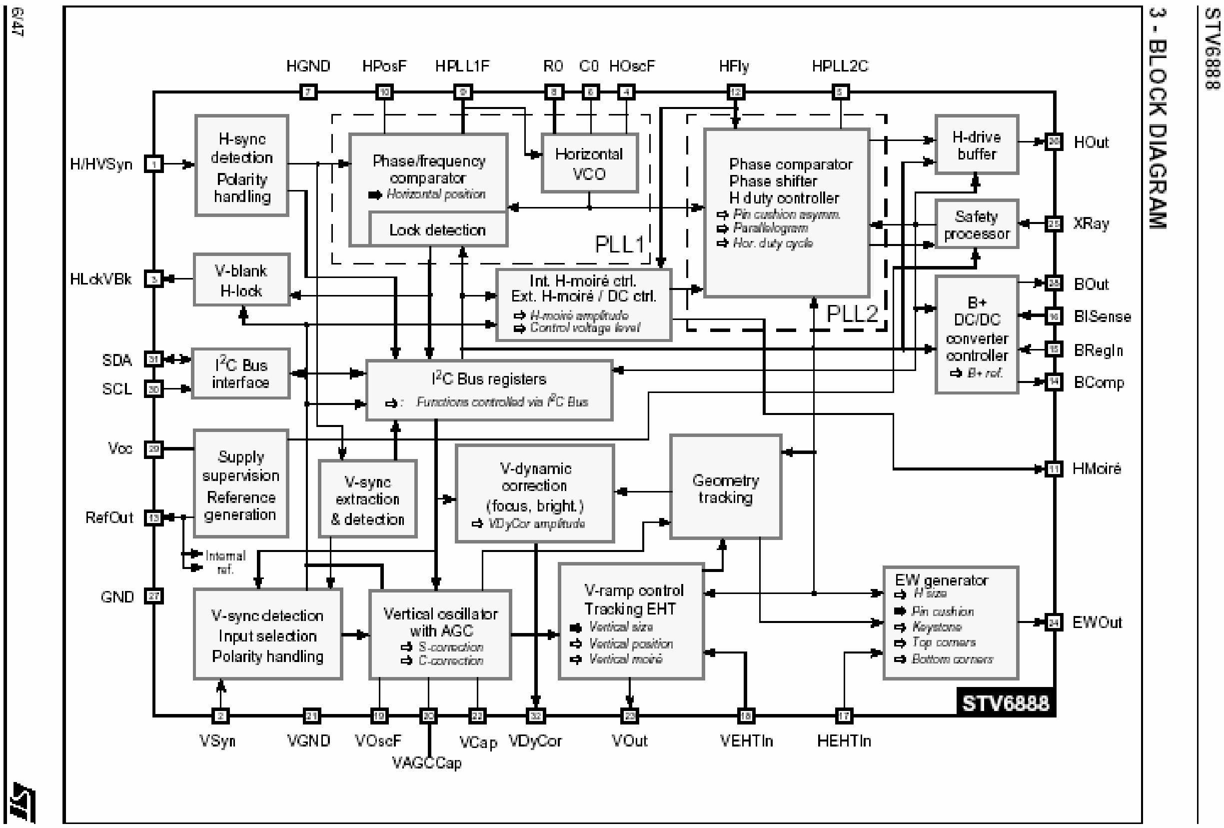


10. IC BLOCK DIAGRAM





IC401(STV6888)



IC803 LM2480NA

Block Diagrams

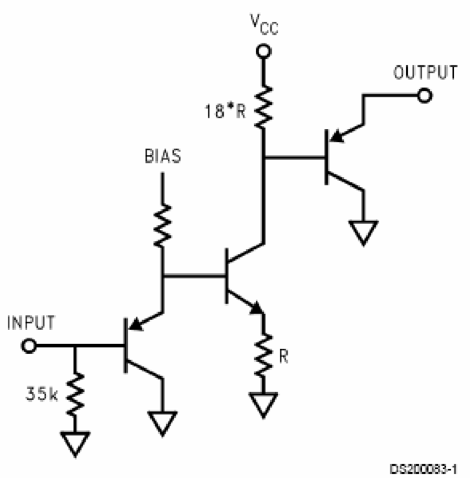


FIGURE 1. Simplified Schematic (One Channel)

Package Pinout

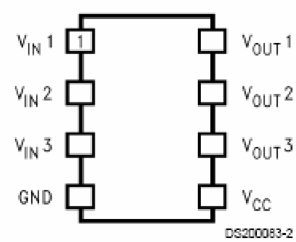
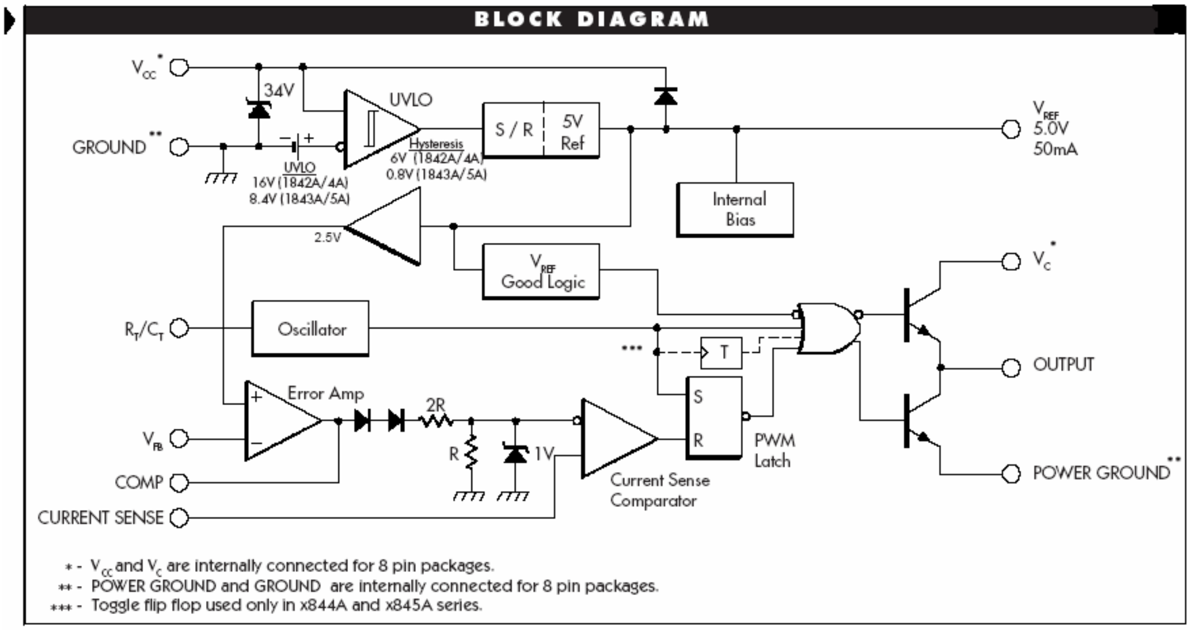
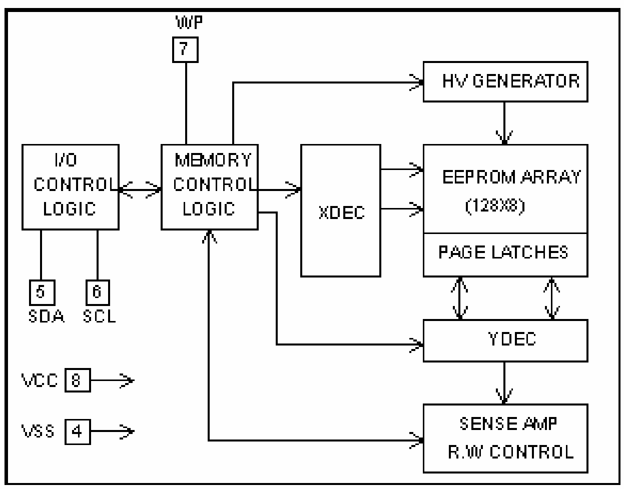


FIGURE 2. LM2480 Package Pinout
Order Number LM2480NA
NS Package Number: N08E

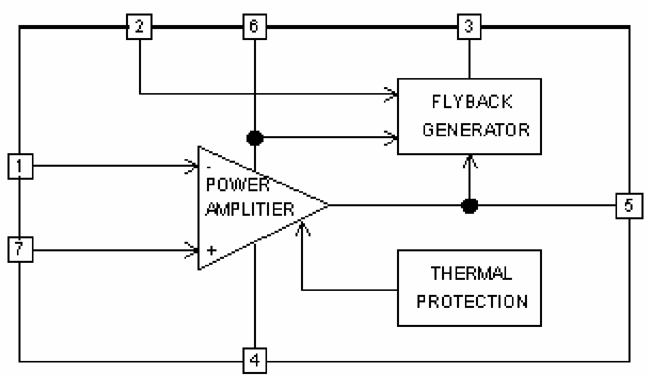
IC901 UC3842A



IC102 M24C08



IC601 STV9302A



IC801 LM1237BDKD

Block and Connection Diagram

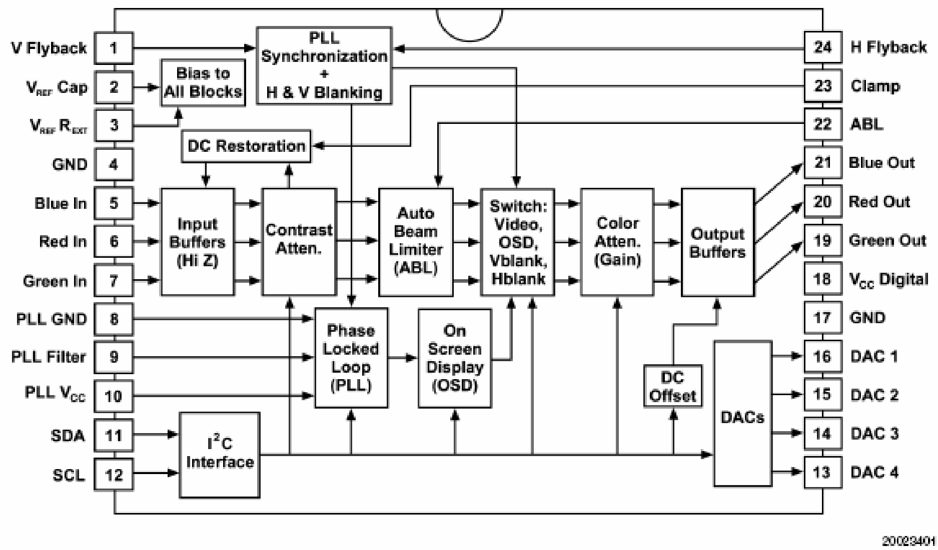
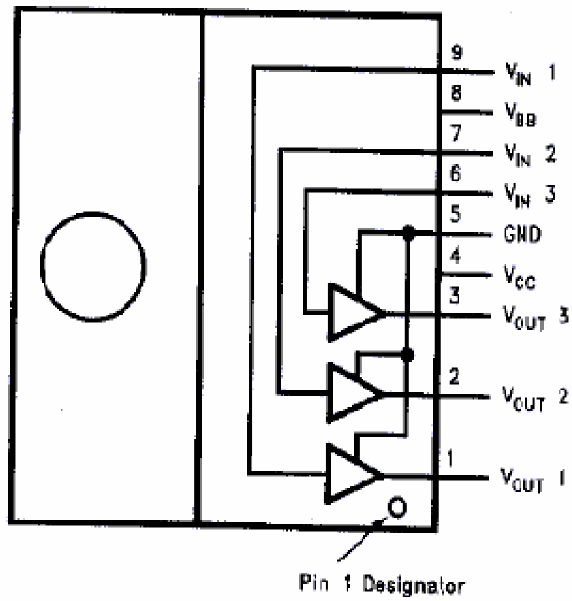


FIGURE 1. Order Number LM1237AAF/NA
See NS Package Number N24D

IC802 LM2466TA

Connection Diagram



Note: Tab is at GND

20043602

Top View
Order Number LM2466TA

IC802 LM2466TA

Schematic Diagram

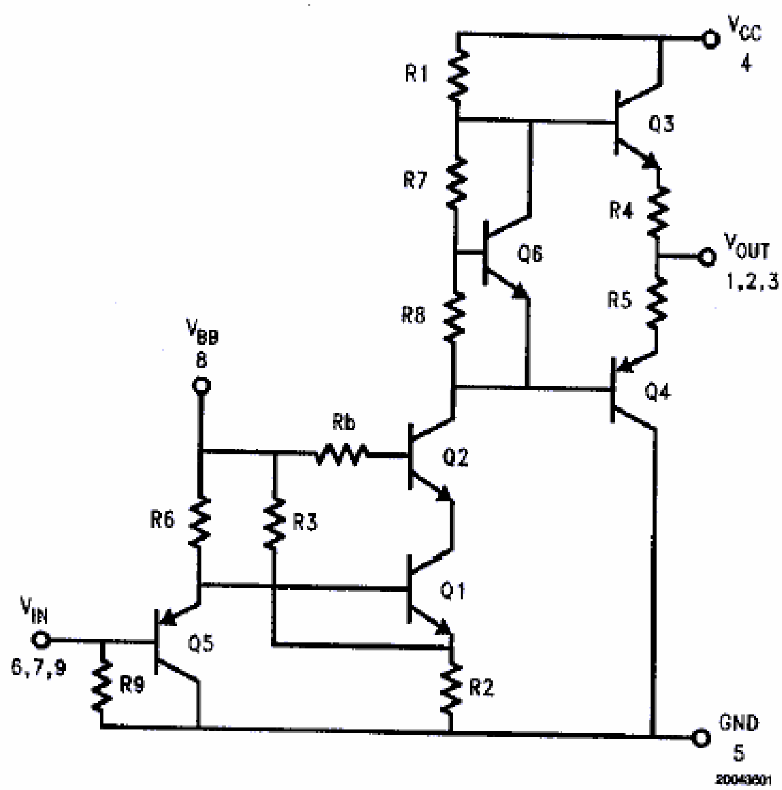
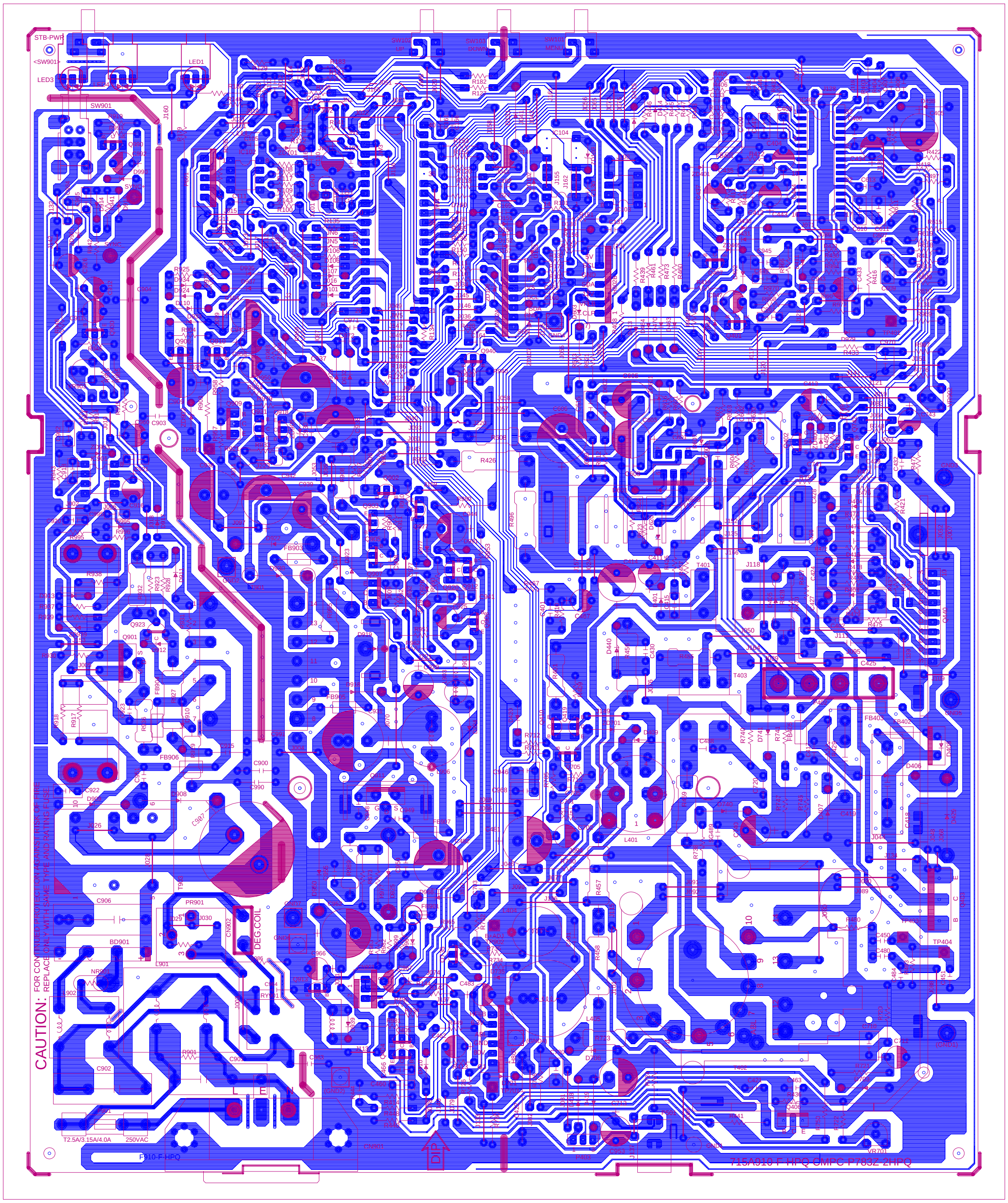


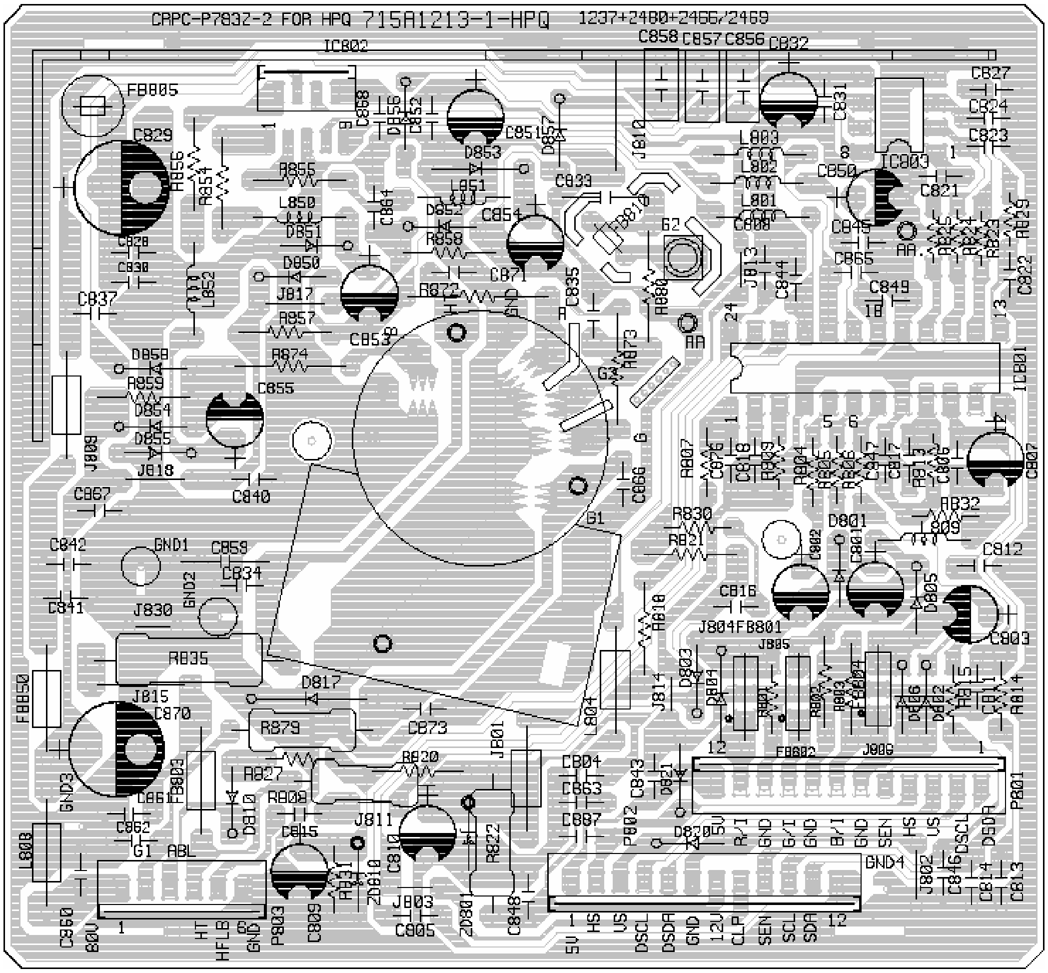
FIGURE 1. Simplified Schematic Diagram
(One Channel)

11. PCB LAYOUT



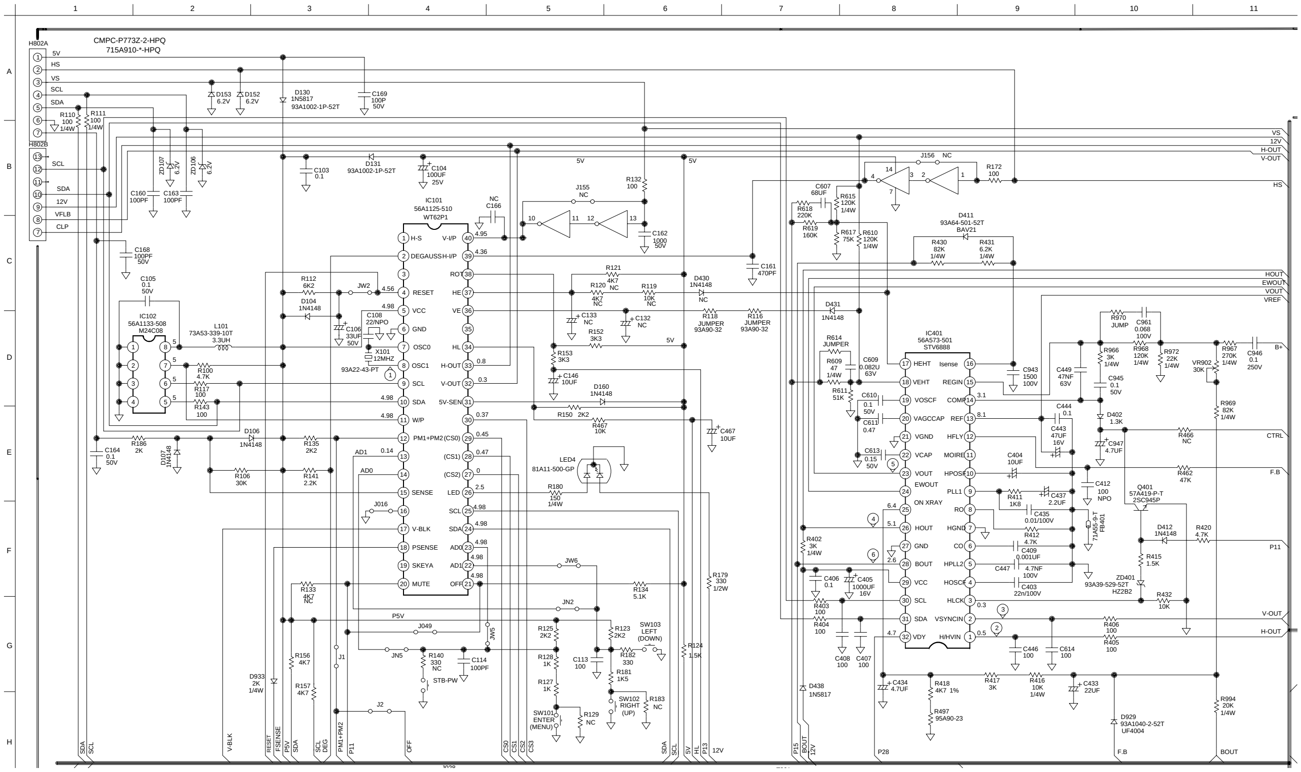
11. PCB LAYOUT

1. Video Board

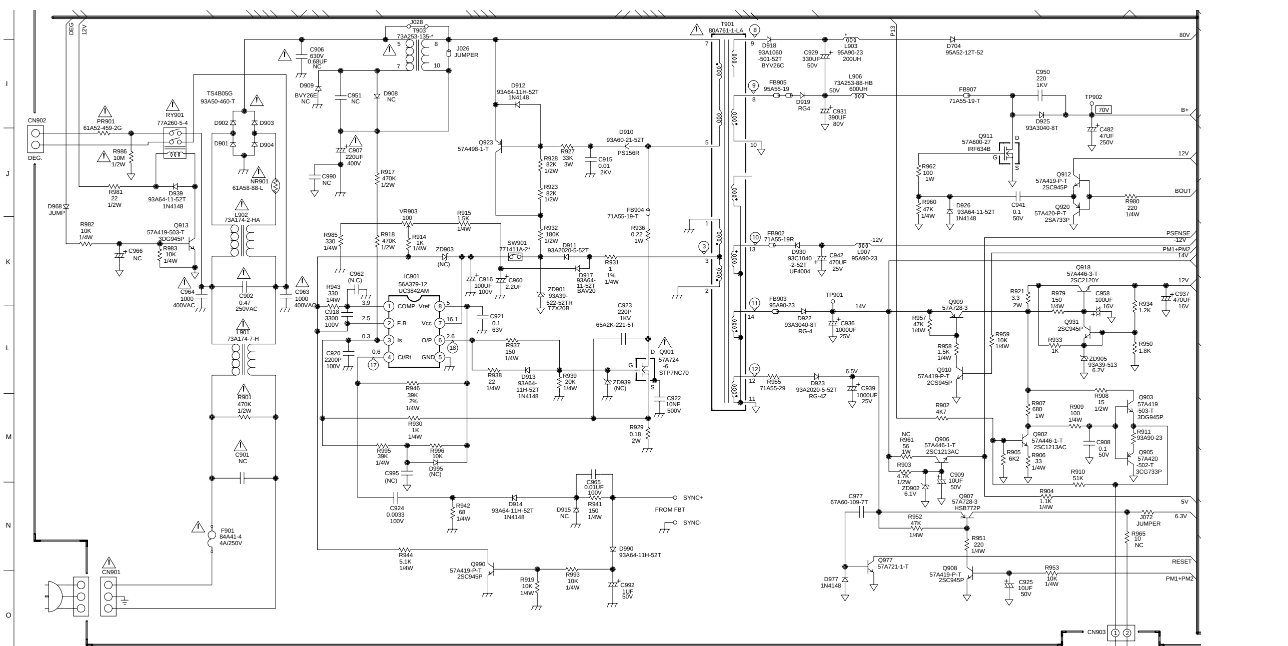


12 SCHEMATIC DIAGRA

12.1 CPU&Deflction Control Circuit

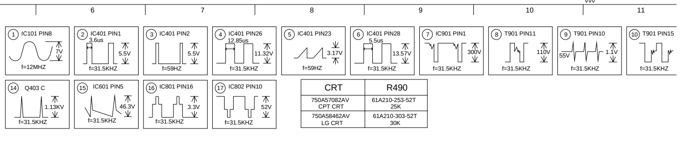


12.2 Power Control Circuit



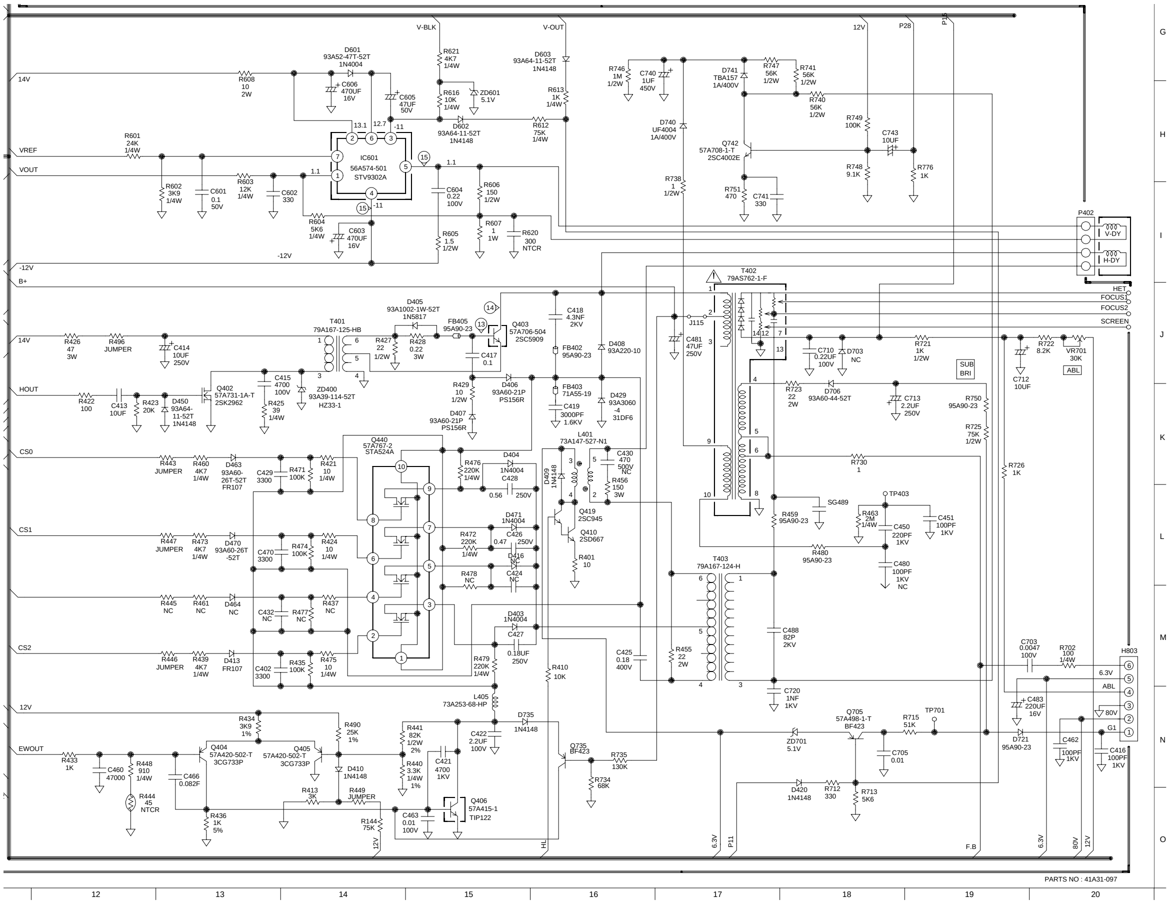
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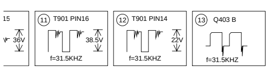
This schematic,we cannot guarantee the accuracy of this information, after the date of publication and disclaims liability for changes, errors or ommissions.



CRT	R490
750A57082AV CPT CRT	61A210-253-52T 25K
750A58462AV LG CRT	61A210-303-52T 30K

12.3 H-V Control Circuit





MODEL	P773Z-2-HPQ	DRAWED BY	H.Z.YU
P/N		CHECKER	
DATE	Jan-09'-2004	APPROVED BY	C.L.WANG

12.4 Video Control Circuit

